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CITIZENSHIP IN
THE INDUSTRIAL WORLD

CITIZENSHIP IN THE INDUSTRIAL WORLD

BY

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PREFACE.

OF books on citizenship there is no lack, and some justification may therefore seem to be required for adding another to the list. What this book attempts is to deal with the problem of citizenship by a new method and from a new standpoint. In most recent works on citizenship the relation of the individual and the State is conceived on traditional lines that date back to Plato. This book is based on the view that the rights and duties of the citizen in the State have been so vitally affected by the industrialisation of the modern world that they can be rightly understood only if due emphasis is laid on the functions of the citizen as a producer and a consumer in the industrial order. The citizen has, indeed, rights and duties other than those involved in the processes of production and consumption, but it is in performing his functions as producer and consumer that the greater part of his waking life is passed, and it is here, if anywhere, that he must find, not only his school of citizenship, but much of its daily exercise. Citizenship is not confined to a relationship to the State; it reveals itself in a system of loyalties to a variety of institutions. Such is the conception that this book attempts to develop.

G. A. JOHNSTON.

GENEVA, *April*, 1928.

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compare the conditions of life now with those that existed at the dawn of history, we find that the enormous differences that emerge are due, not to the eminence of captains and kings, prophets and priests, but to the obscure workers whose patient efforts have made available for humanity the benefits of the wheel, the compass, the printing-press, steam, and electricity.

From this standpoint progress may be defined in terms of an attempt to escape from the bondage of nature. Nature, in a primitive and undisciplined state, provides for man, but provides for him precariously. Man, in his struggle with Nature, has succeeded in winning his freedom and, in emancipating himself from the steady pressure of rudimentary wants. The extent to which this freedom has been acquired may be roughly measured by the surplus man was able to accumulate over and above his daily needs. "Man came to the threshold of civilisation," writes Morgan in his *Ancient Society*, "when he brought about the union of the animal, vegetable, and mineral worlds, that is, when he harnessed the ox to an iron plough for the purpose of cultivating the cereals." The surplus that was thus assured freed man from the constant daily struggle for mere existence, and brought to some men at least the possibility of leisure.

But in acquiring this freedom and possibility of leisure, man has tended to submit to a yoke which he has fashioned for himself. In the constant endeavour to shape Nature more completely to his ends, he has constructed tools and machines ever more powerful, ever more complicated. These tools have tended to master him and bind him to serve their, externally imposed purposes. The very order which he has produced, the industrial order, is a system in which the true ends of life often seem to be obscured.

A study of the effect of industry on citizenship is capital because of the influence on individual character and social morality of the industrial system. The average man spends most of his waking hours in the service of industry. This

service must necessarily exercise a profound influence on the formation of his character. "Man's character," writes Marshall, "has been moulded by his everyday work and the material resources which he thereby procures, more than by any other influence."¹

We may support our view of the importance of the influence exercised upon citizenship by the industrialisation of modern society by reference to the sociological researches of Le Play and his school. Le Play, as a result of some twenty-six years' research, reached certain conclusions with regard to the nature of the influence of work on the organisation of society. These conclusions have been criticised, but in the main they are now accepted by most sociologists.

Le Play pointed out, in the first place, that an examination of the characteristics of early or primitive groups shows that the kind of country they inhabit decides the kind of occupation they will follow. In a thickly-wooded country they must hunt ; on the prairie they must hunt also, but in large groups ; on a bare sea-coast they must fish ; in fertile valleys they must raise crops. All this is sufficiently obvious. It is the next stage of the argument that presents a special interest for us. "The kind of occupation thus forced upon the people tends to determine not only the size of the group, but the constitution and organisation of the society, the relations of the members to one another, the feelings and dispositions of the people, their customs and ideas." Take, for instance, the difference in social organisation between a primitive fishing-folk or forest-hunting group on the one hand and a pastoral people on the other. The small unstable families of the former are contrasted with the large well-organised patriarchal families of the latter. Instead of the callous indifference of the former to the claims of parents and elders, we find among the latter religious veneration for the head of the family. The former are characterised by

¹ *Principles of Economics*, p. 1.

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thriftlessness and inability to look beyond the present, whereas in a pastoral society there is careful provision for the future and even the power of thinking not only of the present life but of a future existence.

These differences of social organisation and mental habit may thus be traced back to the way in which people are forced by Nature to organise their work. As civilisation develops and as social organisation becomes more complex, the kind of work that men do continues to have an influence on their social systems and on the types of citizenship involved in them. When the Industrial Revolution took place, it led to profound modifications in the structure of society. So far as political effects are concerned this has been generally recognised, but it has been almost completely overlooked that with the development of the industrial order the whole conception of citizenship necessarily undergoes a profound change.

To accept the essential truth of the conclusions of Le Play is not to say that we hold a materialistic view of history. Man's systems of social organisation, his very citizenship itself, may have been formed by the influence of his work, but at every stage the mind and will of man have reacted upon his work and intellectualised and moralised it. In certain forms of social organisation the traces of this intellectualisation and moralisation may be hard to discern; but they are always there. The system of social organisation as we know it, pervaded by the spirit of industry, is no non-mental and non-moral system. It is a system of human organisation, and it is what it is because the will and mind of man have contributed to make it.

In the modern State, the vast majority of adult male citizens are industrially employed, and therefore our view of citizenship, whatever it is, must be true of the citizenship of the mass of the industrial workers. It must be practicable in a system in which every man, while obliged to earn his living by the sweat of his brow, would be able to conserve

sufficient energy to devote to the non-material needs of himself, his family, the State, and the other institutions of which he is a member.

§ 3. Inadequacy of Current Conceptions of Citizenship.—Most current thinking on the problems of citizenship ignores the all-pervasive influence of the industrialisation of the modern world. Recent books on citizenship generally continue to obtain their inspiration from the conceptions of Plato and Aristotle. Now, however universal the fundamental philosophical theories of Plato and Aristotle may be, it has long been recognised that Plato's cosmological speculations and Aristotle's views on physics have an interest that is merely historical. And it may be suggested that industrialism has now so affected the nature of all the relations between the individual and the various institutions of which he is a member that Plato's and Aristotle's conceptions of citizenship are largely inapplicable. Greek views on citizenship are, in fact, doubly inadequate to the richness of civic relations in the modern industrial world.

In the first place, citizenship, as conceived by Greek thought, was poor in content. It involved a relation between the individual and the State, and nothing more. If the individual was a member of other associations or institutions than the State, any duties he owed to them were always strictly subordinate to his duty to the State. Loyalty to the State was the sovereign duty, compared to which all other loyalties were trifling. This is sufficiently illustrated by Plato's and Aristotle's views of the family. Different as they are in points of detail, they agree in subordinating completely the family to the State, and Plato's main reason for wishing to destroy the family as an institution is his anxiety to secure that the claims of the State on the loyalty of the citizens should never by any chance encounter conflicting claims on the part of any other institution. The Greek view simply eliminates from the consideration of the problem all the features which constitute its specific

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character. If the citizen's only relationship were to his State, no problem would arise. The reason why citizenship is so difficult in the modern industrial order is that the citizen finds himself at the focus of converging claims from a large variety of institutions. What he seeks is guidance in rightly ordering the various loyalties which he feels he owes.

Good citizenship involves a system of loyalties. The citizen owes loyalty to a variety of institutions and the attitudes of loyalty are various. Burke speaks of the man who "fears God, looks up with awe to kings, with affection to Parliaments, with duty to magistrates, with reverence to priests." All these are emotions or sentiments proper to loyalty. And the loyalties that are claimed by the various institutions may not, at first sight at least, be consistent. The State, in the first place, claims the citizen's loyalty. But patriotism may sometimes seem to him to be in conflict with the duty which he owes to his family or his church or his trade union or even that larger whole, the society of nations. Even if he seeks to simplify the problem by denying his family and withdrawing from all associations, he cannot abstain from the elementary economic relationships of producing and consuming. As a producer and as a consumer, he necessarily has contacts which involve not only rights and duties but loyalties. For dealing with the complex relationships of citizenship in modern industrial life, Greek thought gives little guidance.

In another respect Greek thought on citizenship is even more seriously inadequate. To the Athenian, citizenship with all its benefits was made possible only by the denial of citizenship to four-fifths of the inhabitants. The unpleasant work of life was done by these four-fifths, in order that the one-fifth might be left free for the exercise of citizenship.¹

¹ In Athens at the outbreak of the Peloponnesian War the number of full citizens was between 30,000 and 40,000. The number of slaves has been variously estimated at anything up to 150,000. (See A. E. Zimmern, *The Greek Commonwealth*, pp. 172-174 and 392-393.)

The citizen in Athens was, indeed, free from the necessity of a constant struggle to assure his physical existence, and he enjoyed leisure to devote himself to the pursuit of ends not necessary for mere survival. His citizenship involved participation in all the details of the life of the State, as soldier, elector, jurymen, judge. All these functions of citizenship were rooted in reality as a necessary part of life. If it be asked why Greek culture with its exaltation of citizenship should ever have decayed, the answer is not far to seek. The life of the citizen was made possible at all only because the great majority of his fellow-men were treated as slaves, or as mere craftsmen to whom the common rights of humanity were denied. These slaves and craftsmen did the material work of life and left the citizen completely free for other pursuits. Not only in the city of Athens were the craftsmen despised, but also in Aristotle's "best city." "In the best-governed city," he says, "the citizens should live the life neither of industry nor of commerce, for such a life is ignoble and contrary to virtue."¹

For Aristotle "the citizens" are a privileged class of soldiers and civil servants; from his "freeman's agora" all mechanics, tradesmen, and industrialists are excluded. Thus when Aristotle tells us that the State exists for the happiness of its citizens, and that its whole purpose is to secure their welfare, we must never forget that what he really means is that the State is a mechanism which ensures the employment of a sufficiency of the "lower orders" to make citizenship pleasant and profitable for the select few.

Based on such philosophical conceptions, and on such a system of practice, Greek social institutions inevitably collapsed; for their very foundation was unsound. It was assumed that citizenship could be defined, and it was pretended that citizenship could be practised, without reference to the common needs of securing a livelihood and contributing by personal effort to the creation of the material

¹ οὐτε βάνανσον βίον οὐτ' ἀγοραίον δεῖ ζῆν τοὺς πολίτας, *Politics*, vii. 9, B.

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surplus which is the physical basis of social progress. And the result was that Greek culture, divorced from work, was brought by its inner self-contradiction to complete dissolution.

It is this inner self-contradiction in the Greek scheme of life which makes it impossible in the modern industrial order to adopt the Greek interpretation of citizenship.

§ 4. Socially Beneficial Developments in Industry.

—The modern industrial order often seems so unfavourable to a full exercise of citizenship that many thinkers have explored the possibility of a return to the social and economic conditions of a more primitive age. But it is useless, in our search for the conditions of realisation of true citizenship, to seek to put back the hands of the clock and return to the social economy of the Middle Ages. Even in a country as little industrialised as India Mr. Gandhi's appeal to return to the ancient ways of the bullock plough and the spinning wheel fell upon deaf ears. Whatever be our philosophy of history, whether we believe in a purposeful process of evolution or a mechanical succession of blind events, a return to the domestic or the gild system is impossible.

Facing, then, with open eyes the industrialisation of the modern world, with its ruthless Robot-like processes, must we abandon hope of citizenship? Must we accept Samuel Butler's vision, in which man becomes a parasite of machinery, an appendage of the reproductive system of huge and complicated engines in which all his human functions are lost? By no means. There is evidence that, though the industrial order would appear to be permanently established, socially significant modifications in some of its chief features are in process of being realised. The danger that machinery would become the master of man is passing away. Man is finally, after a hard struggle, assuring his mastery over machinery, his rebellious servant. The industrial system itself, by its own inner development, is providing the cure for its own ills.

This cure is a threefold one.

In the first place, the form of industrial power is changing. Electricity and oil are becoming the chief sources of industrial power. The social significance of this change is very great. Most of the incidental evils of the industrial order have been due to the use of coal as the chief source of power. To coal was due the smoke-laden atmosphere and sunless streets of our industrial areas. To coal was due the centralisation of industry, with its resulting congestion of population. The extent to which electricity is being employed in the United States, Canada, Switzerland, Italy, and some other countries already makes it possible to appreciate some of its effects on citizenship. The use of electric power, which is easily distributed, leads to the decentralisation of industry. And electricity is clean. It does not convert the whole neighbourhood into a black country. As the use of coal altered the face of industry in the direction of centralisation, so the use of electricity is altering it in the direction of decentralisation. This may be expected to result in a return to smaller communities in which citizenship will find a more favourable field for development. Electric power, under public control, widely and cheaply distributed, offers the hope of a new era of economic and intellectual freedom. By the adaptation of electricity to domestic use in the house at cheap rates, as in Southern Ontario and California, to light, to cook, to sew and wash and vacuum-clean, life in the country becomes possible for the industrial worker. The economic and social results already attained by the use of electricity are such that it is hardly rash to forecast that "white coal" will produce changes as remarkable as those ushered in by the industrial revolution.

In the second place, industrialism has definitely rejected for its workpeople the long working day of twelve hours and more. The eight-hour day, after being for years an apparently unattainable ideal, is now a reality. There exists practically no industrial country where, since 1918, the

eight-hour day has not been accepted as the common rule. Even where it has been criticised, even where anxiety has been manifested by employers or Governments, even where special exceptions have proved indispensable, the eight-hour day remains in force in most of the industrial countries of the world.

The consequences of this reform, from the standpoint of citizenship, are two. The industrial worker is able to devote himself to his work with that loyalty in which good citizenship consists. When a man felt that his whole life was consumed in galley-service twelve hours and more a day, it was very hard for him to be perfectly loyal in the performance of his functions. But in the shorter working day loyalty is possible. For the worker realises, or should realise, that he must work, not only to secure for himself and his family the material conditions of life, but also to help to constitute for the community that surplus of goods which is the material foundation of social progress. And he also realises that under normal circumstances eight hours of work leave him sufficient time and sufficient energy to enable him to devote himself to the interests of the institutions which claim his loyalty in citizenship. He now has spare time. Leisure now has a meaning for him. In his hours that are his own he can serve directly the community interests of his ward or municipality, his church, his club, his trade union or his co-operative society. He can take a real interest in education and in politics and prove his citizenship in public and private duty.

In the third place, the industrial order is providing a more and more adequate material basis for the life of each citizen. The material basis of the good life is not everything, but it is something. And it is the industrial system, with all its application of science to processes of production, that has made possible the vastly improved material conditions of life of the citizens of most of the countries of the world. Take, for instance, the richest country in the world.

In a hundred years the population of the United States has increased tenfold, but it is probable, says Professor John R. Commons, that the "services for the ultimate consumers have increased forty-fold."¹ Professor Commons gives some striking examples of the general advantages secured by industrial progress. One hundred years ago, the work of seven farmers' families was required to feed eight families, now seven feed twenty-one. Again, compositors in printing establishments turn out to-day five times as many columns of type in an hour as they did forty years ago, and in the same period the compositor's hours of work have been reduced from eleven or twelve per day to seven or eight, and his wages have doubled. The employers make bigger profits than they did, and the ultimate consumer has also benefited because he gets better newspapers at a lower price.

The wage earners of Britain and also of most other countries are certainly much better off, in most things that make for welfare, than those of two generations ago. Not only are they better fed, better clothed, better housed, but they also work under more favourable conditions. All their material circumstances are better. And their intellectual circumstances also are better. They are better educated and therefore more keenly alive both to their present situation and to the possibilities of the future.

Of the three influences to which attention has been drawn, no single one in isolation would necessarily lead to an improvement in the conditions of citizenship. But, taken all together, their cumulative effect is undoubtedly important. If the industrial system is providing for the citizens as producers, first, an environment that is not uncongenial, second, a working day sufficiently short to leave them real leisure and enough energy to make good use of it, and finally, the material means necessary to live the life of citizenship, it cannot be fundamentally evil. And

¹ *Legal Foundations of Capitalism*, p. 321.

the most hopeful thing for the future of citizenship is that the industrial order with all its social consequences is still in the making. It is still plastic. The problems of its civic orientation and its influence on the personality of the citizen are problems which it is still possible to solve.

The questions people are now asking about industry are new questions. What kind of community-life does the industrial order render possible? To what extent does modern industry make for the intensification of citizenship? These questions are not those that used to be asked. The aspects of industrialism that used to engage men's minds were almost exclusively economic. Now it is the social aspects that are beginning to demand attention. The criterion is not so much quantity of commodities as quality of life. Modern industrial organisation is being regarded in the light of the human ends which it serves. The great problem of the future is the adjustment of this organisation to minister to the development of citizenship.

§ 5. **Conflicts of Loyalty.**—Good citizenship, we have said, is the right ordering of all our loyalties. The conflicts that may arise between these loyalties will not be resolved by trying to weaken any one of them. The loyalties of citizenship should be real loyalties, and the objects of loyalty should be known and felt. For good citizenship involves a certain intensity of life. "Not by learned labour among past ages, not by fancying into life again exploded beliefs and forgotten ways of life was the *Divine Comedy* written, but by living more intensely than others the life of the time, feeling more keenly than others felt, hoping more ardently, imagining more distinctly, speaking more eloquently."¹

The study of citizenship in the modern industrial world must recognise that the causes and institutions which claim a man's loyalty are now infinitely more numerous, and the claims themselves are infinitely more insistent, than ever before.

¹ Seeley, *Lectures and Essays*, p. 182.

In some cases the institutions to which loyalty is owed may be represented as concentric circles. Narrowest in area is the circle of the family, next comes the neighbourhood, whether urban or rural, then shire or canton or province, and finally the State. And beyond the State comes the comity of peoples, the body of mankind at large.

Other institutions to which loyalty may be due may be pictured as eccentric circles. The area of a church is a circle of which the circumference may intersect those of various states, without completely including any. A trade union and a social club may include an area common to both. The interests of a city and an industry may be partly coincident and partly foreign to one another. It is in areas common to two or more institutions that conflicts between the various loyalties of citizenship are particularly liable to occur.

In all his loyalties the citizen is apt to be influenced by what is nearer to him. It is in the narrower circle, the more intimate circumambience, that loyalty is naturally more intense. It is significant, as Professor Gilbert Murray has pointed out, that the temple of Olympian Zeus begun by Peisistratus remained unfinished throughout the whole period of Greek history, while the temples of the localised Athena and Poseidon, "the native Earth-maiden and the native Sea," received all the treasures of Athenian genius and Athenian wealth.

The loyalties of the narrow circle are good. The best beginning for citizenship is "to be attached to the subdivision, to love the little platoon." But the loyalties of citizenship extend beyond this. They extend beyond the family, the church, the industry, the city, and even the State. For the citizen is more than a member of a family or a church or an industry or a city or a State. He is all of these together and more. He is the centre of a series of social relationships ; he is more than the sum of these relationships.

It is the purpose of this book to examine the meaning of

citizenship in the light of the various relationships into which the citizen enters and the various institutions to which he owes loyalty. This examination rests on the view that the world in which we live is essentially an industrial order. In the next chapter we accordingly survey the main features of the modern industrial order. This is the environment in which citizenship must develop. Then we pass to the main argument of the book. In three chapters the dominant functions of the citizen in the modern industrial order are examined. As a producer, the citizen is considered in relation to various aspects of the processes of production. As a consumer, he is regarded in the light of the system of rights and duties in which he is involved. And the concluding chapter examines the body of loyalties that are claimed from the citizen by the State and the other social institutions of which he is a member. It is in this system of loyalties that the citizenship of the producer and the consumer finds its fullest realisation.

CHAPTER II.

THE MODERN INDUSTRIAL ORDER.

§ 1. **Characteristics of the Industrial Order.**—The order of civilisation in which we live is the industrial order, and if our study of citizenship is to have any meaning, we must make clear to ourselves what the industrial order is and what are its foundations, implications and tendencies.

That the industrial system has sometimes had tragic consequences is not open to doubt. The first results of the Industrial Revolution in Great Britain, familiar as they are as a commonplace of history, cannot even now be contemplated without shame. Let Mr. and Mrs. Webb recapitulate the facts: "Relays of young children destroyed in the cotton factories; men and women, boys and girls, weakened and brutalised by promiscuous toil in mines and iron works; whole families degraded by the indecent occupation of the tenement houses of the crowded slums; constantly recurrent periods of under-employment and unemployment, and consequent hunger and starvation; food adulterated, air poisoned, water contaminated, the sights and sounds of day and night rendered hideous: these are the commonplace incidents of the industrial Britain of the beginning of the nineteenth century, discovered and re-discovered, not by sentimental philanthropists and sensational newspaper reporters, but by Departmental inspectors and Parliamentary inquiries."¹

And the same conditions are recurring to-day in China,

¹ *Decay of Capitalist Civilisation*, p. 9.

where a similar industrial revolution is taking place. A sufficient indication of this is contained in the evidence of an official Commission appointed by the Shanghai Municipality to enquire into the conditions of labour of children in Shanghai and the vicinity.

"The commencement age (of employment) varies with the nature of the employment, but it can be asserted that, generally speaking, the child begins to work in the mill or factory as soon as it is of any economic value to the employer. The Commission has visited a number of mills and similar places of employment, both during the day and at night, and has seen very many children at work who could not have been more than six years of age. The hours of work are generally twelve, with not more than one hour off for a meal. The children frequently have to stand the whole time they are at work. In many industries day and night work is the rule, there being two shifts of twelve hours each. . . . In many cases the atmospheric and dust conditions are bad. The sanitary arrangements in the majority of mills and factories leave very much to be desired. The average earnings of a young child are usually not more than twenty silver cents a day. The contract system of employment is common. Under this system the native contractor supplies the requisite labour and is paid on production. This system is obviously open to grave abuse. The Commission heard evidence to the effect that in some instances contractors obtain young children from the country districts, paying the parents \$2 a month for the services of each child. By employing such children in the mills and factories the contractor is able to make a profit of about \$4 a month in respect of each child. These children are frequently most miserably housed and fed. They receive no money and their conditions of life are practically those of slavery."¹

We admit, then, in the fullest degree the disastrous

¹ Report of Shanghai Child Labour Commission, July, 1924. *Municipal Gazette*, Vol. XVII., No. 927, p. 261.

consequences that have sometimes resulted from the introduction of the industrial system. But to argue that because such conditions exist at an early stage in the development of the industrial order they are therefore essential to it is not only bad logic but also bad history.

Though conditions of life and labour, as they exist under the industrial order, are far from what they ought to be, they are infinitely better for the majority of the citizens than before the Industrial Revolution. Any serious historical study will show that before the Industrial Revolution, the people were sunk in the deepest poverty and degradation. It is only an incurably romantic spirit, coupled with grave ignorance, which can see in the "good old times" a state of affairs better for the average citizen than things as they are to-day. Not only are the total resources of a country like Great Britain much greater now than they were a hundred and fifty years ago, but, so far as the material conditions of welfare are concerned, the great mass of the citizens are definitely better off.

This view of industrial development is emphatically supported by the late Professor William Smart, a good economist and a good historian, and by Mr. A. E. Zimmern. "There is still poverty in Western Europe," says Mr. Zimmern, "but it is preventable poverty. Before the Industrial Revolution, judged by a modern standard, there was nothing but poverty. The satisfying physical and economic condition which we describe by the name of comfort did not exist. The Italian historian Ferrero, in one of his essays, recommends those who have romantic yearnings after the good old times to spend one night on what our forefathers called a bed."¹ "There never was a golden age of equality of wealth," writes Professor Smart, "there was rather a leaden one of inequality of poverty. . . . We should speak more guardedly of the riches of the old

¹ A. E. Zimmern, *Nationality and Government*, p. 150.

world. A careful examination of any old book would show that the most splendid processions of pomp and luxury in the Middle Ages were poor things compared to the parade of a modern circus on its opening day.”¹

And finally, another good correction to the tendency to worship the “good old times”: “Bad as our urban conditions often are, there is not a slum in the country which has a third of the infantile death-rate of the royal family in the Middle Ages.”²

The industrial system, as we know it, has arrived as a result of a process of development. To examine in detail the characteristics of that process of development would take us too far afield, but one or two leading features may be mentioned. In Ancient Greece such industries as existed were carried on by slaves or by the lowest grades of free inhabitants. Industry was the preserve of the *βάναντος*, a man deprived of full civic rights. In the Middle Ages, three systems may be distinguished, in each of which free citizens discharged economic functions. The first system of organisation is the “family” or “household” system, in which each household provides, with very few exceptions, for all its own needs. It grows its own food, and makes its own clothes. In the second stage, we reach the “handicraft” system, under which each man specialises in some particular line of work. He becomes a wood-worker or a stone-worker, and exchanges the product of his labour for the products of the labour of others. He is his own master, and stands or falls by his own efforts. In the third stage, which has been called the “merchanting” system, the independent handicraftsman continues to exist, but an intermediary class of merchants or middlemen assume great importance. The individual handicraftsman working in a village finds difficulty in disposing of all his wares, and he has not the time nor the inclination to hawk them from

¹ W. Smart, *Second Thoughts of an Economist*, pp. 17-18, 22.

² J. B. S. Haldane, *Dædalus*, p. 54.

village to village. This menial task is performed for him by the obliging middleman. But the middleman, from being a sort of menial, rapidly acquires the position of a master. And in the latest development of this system, the individual craftsman may often work almost exclusively for a particular merchant.

We have not yet reached the stage of the modern industrial order. Before the industrial system can develop, three conditions must be fulfilled.

In the first place, there must be an accumulation of available capital, and a sufficiently orderly and stable Government to provide some sort of assurance that those who supply the capital necessary for industry will receive reasonable profits, in other words, that the present gratification which they forego in lending money for industrial development will not be ultimately lost. The industrial order cannot exist in an area such as Georgia, where no stable Government exists.

In the second place, it must be possible to obtain large numbers of workers willing to be organised for the performance of a common task. Nigeria, for instance, is not yet industrialised, partly because though the natives are numerous, they are not willing to submit to the regimentation that is involved in the modern industrial order.

Finally, and this is frequently overlooked, an industrial system is impossible without a body of scientific knowledge, to make and utilise mechanical inventions. The rudimentary beginnings of industrialism in ancient Egypt were due to scientific discoveries ; and countries like China, in which the first two conditions we have mentioned were present, remained non-industrial owing to the lack of knowledge how to make and utilise mechanical inventions.

These conditions have varied to some extent from country to country, and in certain cases they have been combined with others. In England, for instance, the conditions which made the industrial order possible have been vividly stated

by Mr. D. H. Robertson. "There is not much reason to suppose that in England at the end of the eighteenth century mankind suddenly became tenfold cleverer and more ingenious than it had ever been before. It was rather that various weights and repressions, so to speak, were removed, and the age-long advantages of elaborate differentiation and scientific method allowed at length to tell to the full. Peace and security at home led to the accumulation of savings by persons able and willing to use them in experimenting with new forms of industrial technique and organisation; conquest and discovery abroad led to a colossal widening of the potential market for the products of a highly differentiated industry. A revolution in road and canal transport preceded, in rail and sea transport followed, the revolution in manufacture. Population found in the demands of factory industry an outlet for its long-thwarted impulse towards expansion; and the growth of population gave rise to an aggregate of wants which could be satisfied by no other methods than those of factory industry."¹

Are there any features which are generally characteristic of the industrial order, whenever and wherever it develops? If we could examine the industrial order as the chemist examines a crystal, or the biologist an amoeba, what would we find to be its characteristics? What is the anatomy of the industrial order?

But, first, what is our definition of the industrial order? If we define it to mean the system under which commodities are produced by labour specialised and organised to operate machinery on a large scale, we shall find that this definition directly implies all the chief characteristics of that order.

In the first place, it is the system of large-scale machine production, with standardisation of product. In the second place, it implies organisation of labour, the regimentation of workpeople under discipline. Thirdly, this work must be

¹ D. H. Robertson, *The Control of Industry*, p. 13.

specialised : division of labour and specialisation of function are involved. In the fourth place, industrialism has involved centralisation of factories, and consequently of population. Fifthly, it involves capitalisation. In the sixth place, it has led to a great development of the importance of marketing, with its emphasis on the creation of demand. And finally, it essentially implies, by a sort of inner logic, international relations.

These characteristics of the industrial order have been enumerated coldly and abstractly as an astronomer, gazing through a telescope, would count off the rings of Saturn. Each of them must now be considered as a characteristic of the conditions of life and labour of men and women, as an influence with power to make or mar their citizenship.

§ 2. **Machine Production.**—The first characteristic which we have found to be typical of the modern industrial order is machine production. The chief feature of the Industrial Revolution between 1760 and 1820 was the rapidly increasing application to industry of a series of mechanical inventions. The result of this application in the case of the earliest inventions, those connected, for example, with the textile industry, was an enormous development of industry and great financial gains to all who were sufficiently acute and sagacious to take advantage of the opportunities offered. Inventors and employers were stimulated to greater and greater efforts, and the tendency to use machinery increased with cumulative force. Experience showed that in the development of the use of machinery in manufacture a general principle was at work. This principle may be formulated in various ways, but no better expression can be given to it than that of Marshall : " Any manufacturing operation that can be reduced to uniformity, so that exactly the same thing has to be done over and over again in the same way, is sure to be taken over sooner or later by machinery." ¹ It may be difficult to invent the

¹ *Principles of Economics*, p. 255.

necessary machinery, delays and obstacles may have to be overcome, but if the work to which machinery is to be applied is on a sufficiently large scale, it is certain that sooner or later the operation will be handed over to the machine.

But machinery will only be invented and will only be used if the products to be manufactured are susceptible of standardisation and if there is sufficient demand for them to make it possible to produce them on a large scale. If the demand for a certain article is small, and is not susceptible of expansion, then machinery will not be used in its manufacture. Similarly, if uniform, standardised products are not desired, then again machinery will not be used, because it is a characteristic of the machine to turn out each article and each part exactly similar to the last. Machine production, then, is essentially large-scale production, and is essentially the production of standardised articles.

Now what is the influence of machine-production, as explained above, on the life of the community and on the life of the individual citizen? There are those who tell us that it is altogether bad.

Take, for instance, the indictment of machine-production as the essential characteristic of the industrial order by Mr. R. Austin Freeman: " Mechanism, by its reactions on man and his environment, is antagonistic to human welfare. It has destroyed industry and replaced it by mere labour; it has degraded and vulgarised the works of man; it has destroyed social unity and replaced it by social disintegration and class antagonism to an extent which directly threatens civilisation; it has injuriously affected the structural type of society by developing its organisation at the expense of the individual; it has endowed the inferior man with political power which he employs to the common disadvantage by creating political institutions of a socially destructive type; and finally, by its reactions on the activities of war, it constitutes an agent for the wholesale destruction of man and

his works and the extinction of human culture. It is thus strictly analogous to those antibodies by which the existence of aggregates of the lower organisms is brought to an end." ¹

Or listen to the denunciation of machine-production by Mr. A. J. Penty: "Before the war, protests against the abuse of machinery were mainly of two kinds: economic and æsthetic. There was the economic objection of those who found their labour displaced by some new invention, and the æsthetic objection of the followers of Ruskin and Morris. But neither of them were taken very seriously. The complaints of those who found their labour displaced were not listened to because such inconveniences were supposed to be inevitable to a time of transition, while the æsthetic objection was treated by most men with something approaching contempt. Nowadays all this is changing. It is becoming apparent to an ever-increasing number of thinking people that there is a definite connection between the economic deadlock that has overtaken society and our mechanical methods of production, since, apart from such methods, it is obvious that the problem on such a gigantic scale could never have come into existence." ²

I have quoted these two criticisms, in preference to similar ones which might be found in Ruskin, for example, because both have been written in the last few years and represent a considered point of view of the present day.

What is the gravamen of the charge? It is that machine-production is antagonistic to human welfare. This is a serious charge, and it is worth examining. In a sense, this whole book is an examination of this criticism, for the purpose of the book is to consider the meaning of citizenship in the industrial order. It must therefore necessarily ask: "Is the welfare of the citizen realisable under the mechanistic conditions of the modern industrial order?"

In the first place, there is no doubt that the material

¹ R. Austin Freeman, *Social Decay and Regeneration*.

² A. J. Penty, *Post-Industrialism*, p. 12.

welfare of the community as a whole has been immensely benefited by the cheap and abundant production made possible by machinery. The national dividend has enormously increased. And the size of the national dividend is regarded by Professor A. C. Pigou¹ as the first of the three conditions of the economic welfare of a community.

Now, while this increase in the national dividend has been due to a variety of causes, the greatest is undoubtedly the increased efficiency and absence of waste due to the large-scale employment of machinery. The conservation and utilisation of what under a more primitive order of society is regarded as waste is one of the most striking features of the industrial order, and is perhaps the chief secret of the increased material welfare to which it has led. It has always been a characteristic of the industrial order to exploit what a more ingenuous state of society has found no use for ; but while in the early stages of its development these natural resources were used in a relatively wasteful way, increasing endeavours are now being made to put to use what was previously considered to be waste-products. In an early stage of manufacture, the manufacturer had an eye only to his main product. What was not of value in connection with the main article produced was thrown aside as waste. But it gradually came to be realised that many of these by-products were commercially utilisable. Slag from steel-works, for instance, was found to be valuable for making fertilisers, and it is therefore no longer regarded as waste. By far the most striking example of the utilisation of by-products is, however, to be found in the case of the production of coke. Coke was formerly obtained by burning coal slowly in coke-ovens with open tops through which the volatile matter escaped. Then it was found that the volatile matter contained not only coal gas, which was commercially utilisable for lighting and heating, but also a variety of other products such as benzol, which could be utilised in the

¹ Prof. A. C. Pigou, *Economics of Welfare*, p. v.

manufacture of chemicals and dyes. The importance of these by-products during the war led to the installation of special plants and the recognition that these by-products were, for the time at least, the main products. In every field of manufacture alike, it is recognised that the difference between commercial failure and commercial success may lie in the fullest exploitation of by-products and avoidance of waste. As we shall see in detail later, the ideal that waste should be eliminated is only as yet very imperfectly realised. Its increasing recognition in all departments of the industrial order is one of the surest guarantees of the development of the contribution of industry to the welfare of the citizens and the community.

The introduction of machinery, in addition to avoiding waste, has led to a great improvement in the efficiency of labour. Take a single example from the textile industry. "The efficiency of labour in weaving," says Marshall, "has been increased twelve-fold, and that in spinning six-fold, during the last seventy years. In the preceding seventy years the improvements in spinning had already increased the efficiency of labour two-hundred-fold."¹

And this increase in efficiency had not led to any decrease in the employment afforded to the workers. The contrary is, in fact, the case. The most amazing example of the increase in the total volume of employment that results from the introduction or extension of the use of machinery is to be seen in the case of the cotton textile industry. Before the times of Crompton and Arkwright, there were, it has been stated, only 8000 operatives in the British cotton industry; twenty-seven years later there were 300,000; eighty years later there were 800,000; and if those engaged in the manufacture of machinery for the industry are included, well over 1,000,000 workers are now engaged in it.

But, it may be objected, even if it is admitted that the material basis of the welfare of the community is improved

¹ Marshall, *Principles of Economics*, p. 263.

and not impaired by mechanical production, what of the individual producers themselves, the workers whose functions are largely reduced to those of machine tenders? What has been the repercussion on their lives of machine-production?

It is sometimes argued that the use of machinery has reduced the contribution of the human worker to what Mr. Freeman calls, in the passage quoted above, "mere labour."

Now there is, in fact, no evidence at all for this. The evidence is all the other way. There is no doubt at all that the increasing use of machinery is leading to the abolition of mere hard labour, brute toil that is disabling. The reforms introduced by the industrial era lead us to ignore the conditions under which the workers in the pre-industrial era worked. Let us take some contemporary evidence. Adam Smith tells us that "a carpenter in London and in some other places is not supposed to last in his utmost vigour above eight years. . . . Almost every class of artificer is subject to some particular infirmity occasioned by excessive application to their peculiar species of work."¹ The disablement of carpenters was due to the necessity of working with the jack-plane for smoothing large boards for floors and other purposes. This work is now done by machinery. Similar evidence with regard to the prematurely exhausting effects of hard manual work in a non-industrial community is to be found in present-day China. "Nearly all the lumber used in China is hand-sawed, and the sawyers are exhausted early. Physicians agree that carrying coolies rarely live beyond forty-five or fifty years. The term of a chair-bearer is eight years, of a rickshaw runner four years; for the rest of his life he is an invalid."²

There is no difference between the industrial and the pre-industrial order greater and more full of importance for the welfare of the individual workman than the gradual

¹ *Wealth of Nations*, Bk. I., Chap. VII.

² Sherwood Eddy, *The New World of Labour*, 1924, p. 18.

disappearance of mere toil. Almost every day some work that used to strain men's hearts to breaking-point is handed over to machinery. The charging of blast furnaces is now done by electric fillers, the grain harvests of Canada are transported across the Atlantic without a single docker having to touch a sack. The loading and unloading is all mechanical.

And the elimination of hard manual labour is not only one of the results, one of the by-products, so to speak, of the industrial order, it is even one of the aims set before themselves by industrial leaders who have been most successful in the development of machine-production. Mr. Henry Ford, for instance, tells us that one of his aims has been to abolish drudgery and "donkey-work." "The time has come," he writes, "when drudgery must be taken out of labour. It is not work that men object to, but the element of drudgery. We must drive out drudgery wherever we find it. We shall never be wholly civilised until we remove the treadmill from the daily job."¹ Of the changes introduced in the operations in his plants he says: "A great many—perhaps most of them—are in the line of making the work easier. We do not want any hard, man-killing work about the place, and there is now very little of it."²

The development of the use of machinery has not only eliminated much of the heaviest human labour from industry, it has also led to an improvement in the conditions of work of those employed in industry. A very striking instance, that of the watch-making trade, is mentioned by Marshall. Some years ago, the chief centre of this trade was in Geneva, and the neighbourhood, where watches were made by hand. Great manual dexterity was required, but very little judgment. Conditions of work were bad, the eyesight of the workers suffered, earnings were low and the watches were relatively dear. Ordinary watches are now almost exclusively manufactured by machinery. The result is altogether

¹ Henry Ford, *My Life and Work*, p. 100.

² *Ibid.*, p. 278.

good. The workers no longer need, it is true, to display highly specialised manual dexterity, but in minding the delicate machines which make the various parts, they have scope for skill and intelligence and a sense of responsibility. Their eyesight is not strained and their earnings are better ; and finally, good watches can be produced at a price which brings them within the reach of the poorest citizen in the community.

The economic results of machine production must be considered in greater detail later : in the meantime, we pass to examine the æsthetic criticism of machine-production.

From the æsthetic standpoint, the attack on machine-production is directed chiefly against the standardisation and uniformity of its products. We are asked to compare ugly machine-made furniture with the individual products of the specialist cabinet-maker, ugly machine-made carpets with beautiful hand-made Persian rugs. With this æsthetic argument it is difficult to be patient. In the first place, it is by no means certain that machine-made products are always or usually more ugly than hand-made articles. On the contrary, it is certain that modern machine-made carpets, for example, are so good that even experts find difficulty in distinguishing them from the best hand-made Oriental rugs. And much modern machine-made furniture is as beautiful and in better taste than genuine Jacobean, not to speak of Early Victorian. It is a noteworthy fact that we hear these complaints of the ugliness of machine-made articles only in the case of those products in the making of which machinery has only relatively recently been applied. Does anybody inveigh against the ugliness of printed books, and sigh for the return of the time when each copy of a book was written by hand by a scribe ? Does the publisher's reader complain of the deadly uniformity of typescript, and yearn for the good old days when he could enjoy the variety of handwritten manuscripts ?

And, from the social point of view, the standpoint of

citizenship, machine-production has great and increasing advantages. In the first place, it makes it possible for the products themselves to be enjoyed by ever-widening circles of people. When books were copied by hand, the possession of a book was as rare as is now the possession of a yacht. Machine-production has now made it possible for even the poorest to possess a small library of the best books. Or take again the social advantages conferred by large-scale production in the case of motor-cars. In the United States there is hardly a workman who, if he cared, could not possess, and run, a Ford. There is no doubt that a Ford is less beautiful than a Rolls-Royce or a Lancia; but from the standpoint of citizenship, is it better that 10,000 people should possess a Rolls-Royce, or that 5,000,000 should own a Ford?

A further social advantage of machine-production resides in the fact that the conditions under which hand-made goods are produced are frequently extremely bad. It is the workers who turn out beautiful handworked lace and delicate garments whose working conditions are most appalling, even in advanced industrial countries. And let every social reformer who sentimentally raves over the superior beauty of the craftsmanship of hand-production in Oriental rugs remember that this work was being done in the year 1921, in Persia, by children of five or six years of age employed in appalling conditions for twelve or fourteen hours per day.

§ 3. Regimentation of Labour.—The second of the features which we found to be characteristic of the industrial order is the regimentation of labour under conditions of organisation and discipline. The industrial order would not be possible, however much machinery existed, if workpeople could not be obtained to tend the machines, willing to submit to employment for regular hours in premises supplied by the employer, and under a certain amount of discipline. The organisation of the workers under conditions involving

discipline is, in fact, a necessary consequence of the application of machinery in industry. In the industrial order, the employer supplies the machinery and the premises in which it is situated. He naturally wishes to reduce to the minimum such overhead charges as the provision of power to the machines, lighting, and heating. It is essential, therefore, from the standpoint of economy of production that under normal circumstances his workpeople should begin work at the same time and finish work at the same time. And regularity of work has another *raison d'être*. The factory worker, as in a rolling mill, for instance, or a shipbuilding yard, frequently forms one of a small group employed on a single operation or closely connected series of operations. If one member of the group is absent, the group as a whole is thrown idle. This is waste, not only from the standpoint of the employer, whose machinery is idle, but from the standpoint of the other workers in the group, who lose their day's work. Regularity of work is therefore realised to be necessary not only in the interests of the employer, but frequently also directly in the interests of the workers themselves.

Under the factory system, work is not only regulated in its duration, but regulated also in its intensity. In an early stage of industrial development, a sufficient intensity of work is assured by means of foremen, one of whose chief functions is to stimulate the workers' regular and sustained effort. In a somewhat later stage, the same object is attained either by means of piece-work systems of wages, according to which the worker has a direct monetary interest in increased output, or by means of profit-sharing and co-partnership systems, giving him an indirect financial interest in increased production. In the third stage of development, while the employer may still rely practically on either or both of the above means, his chief method of securing intense unremitting labour is to subordinate, in cases where the conditions of manufacture make this possible, the work of

the worker to the automatic rhythm of the machine. In this third stage, an excellent example of which is the chain system by which motor-cars are assembled, the worker *must* adjust his speed of working to that of the machinery. His own movements are completely subordinated to that of the machine. The important repercussions on the personality of the citizen of this Copernican change in the relation of worker and machine will later occupy our attention in detail. In the meantime, we are simply concerned to draw attention to the importance of the change.

But there is another side to the picture. If the industrial order has involved the regimentation of workpeople on work of regulated duration and regulated intensity, it has also assured to them the possession of complete and absolute leisure. When the worker leaves the factory in the evening, his time and his thoughts are completely his own until he enters the factory on the following morning. If he is under discipline in the factory, he is completely free to dispose of his time as he wills the moment he leaves the factory. And it is only the industrial order which secures to the worker this complete leisure.

In these respects, regularity of duration of work and sustained intensity of work within the factory, on the one hand, and the existence of absolute and complete spare time or leisure on the other, the industrial order differs completely from the non-industrial. The division of life into work and non-work, characteristic of the industrial order, is unknown in the pre-industrial world.

In the pre-industrial order, work and leisure are combined, or rather confused, in the most extraordinary way. The worker was generally his own master free to work or not to work as he liked. It is true that if he did not work he would starve, and it is further true that this elementary economic necessity to work often pressed upon him so severely that he worked too hard. On this point Adam Smith's evidence may again be quoted. "Workmen, when

they are liberally paid, are very apt to overwork themselves and to ruin their health and constitution in a few years.”¹ It is clear that the economic motive led the workman in the pre-industrial era to overwork, just as in the industrial era the same motive leads the business and professional man to overwork. But the workman was then his own master. He might and did work long hours, hours far longer than those now worked under the industrial system, but he was free to begin work when he liked, to slack off when he liked, to stop work when he liked, and his work was a peculiar mixture of toil and relaxation. The smith remained long hours at the village forge, but he was always ready to stop work to have a chat with the passers-by. The weaver at his open window would gossip with every village busybody. The individual artisan had no regular hours of work. He might lie abed of a morning if he wished. He might work till midnight if he wished. He was free and his own master. He was under no discipline save the inexorable discipline of the need to obtain food and shelter.

Those who lightly consider that such a system, unregulated, undisciplined, unorganised, was necessarily more favourable to the development of the personality of the worker than the present system would do well to reflect that vestiges of the pre-industrial system still survive in most industrial countries under the name of home-work. And it is too well known to require any lengthy argument that the conditions of work of home-workers are precisely those which it has been found most necessary in the modern world to protect by legislation. The industrial worker may or may not be able to protect himself. It is certain that the home-worker cannot protect himself. And, apart from the ameliorations which have been introduced by protective legislation, the modern home-worker is working under exactly the same conditions as in the pre-industrial order. He, or more generally she, is not compelled to work an

¹ Adam Smith, *Wealth of Nations*, Bk. I., Chap. VII.

eight-hour day. That is true. But in practice, of her own free will, she works a twelve-hour day or more, with the worst effects on her health. She does not know the meaning of leisure.

The great advantage which accrues from the industrial order, from the standpoint of citizenship, is just that it guarantees and almost consecrates a certain definite portion of every day to leisure. This period is spare time, and a man's daily work never invades it. It has, indeed, been maintained that the conditions of the factory system are such that the workman is unable to put this leisure time to good use. "The corruption of work," says Mr. A. J. Penty, "reacts to corrupt the leisure that accompanies it. For if men are turned into machines, or are engaged in occupations that bring them no pleasure or satisfaction, their life is corrupted at its roots. It matters little if the hours of labour be reduced to six or four hours a day, the corruption will be there all the same."¹

It may at once be admitted that the conditions of the industrial order at an early stage of development, where the working day extended to twelve or more hours, were inimical to the use of leisure. In fact, no real spare time remained. The weary worker had no energy for anything but food and sleep. But all that is changed. The eight-hour day does leave time and energy for the free development of individual interests and aims. The best proof of this is the progress that has been made in the civic use of leisure in the few years since the introduction of the short working day. This development, so vital in any discussion of the significance of citizenship, will be examined in a later chapter.

But, it may be asked, is the only civic advantage of the organisation of labour in factories the negative one that, when they are *not* so organised, they may enjoy all the more intensely their leisure, their freedom from organisation? If

¹ A. J. Penty, *Post-Industrialism*, p. 46.

this were so, one might as well argue in favour of the compulsory imprisonment of the whole population on the ground that their enjoyment of freedom would on their liberation be so acutely intensified !

Positive civic advantages of industrial organisation do exist, and they are not difficult to find. In the first place, the individual factory is not infrequently a real community, a social centre for the employees, a field in which the civic virtues may develop. Why is it that from the social standpoint, the standpoint of citizenship, the countryman is so backward in development compared with the factory worker ? Often it is because in his factory the worker's intelligence is stimulated, his will is developed, his social consciousness is awakened, by association with his fellows. This is true not only in the case of establishments like the Lever factories at Port Sunlight or the Cadbury factories at Bourneville, where special efforts are made by the companies to encourage the workers to develop a corporate spirit. It is true also of the average factory, large or small, throughout the length and breadth of the land. This corporate spirit is developed not only in relation to work, but also in relation to play.

In relation to work, there is the Works Committee. The Works Committee in a particular factory focusses the corporate interests of the workers in the factory in regard to the conditions under which they work and sometimes even in regard to the general financial position and prospects of the factory. From this standpoint, the factory is a little community whose social parliament is the Works Committee. That the Works Committee is no rarity is suggested by the result of the enquiry conducted in 1917 by the British Ministry of Labour, which showed that over 1000 Works Committees were in existence in Great Britain.¹ It was found in this enquiry that the work done by the Works Committees was frequently of the highest interest and importance. In America, there were in existence in 1924,

¹ *Supplementary Report on Works Committees*, Cd. 9001.

814 employee representation plans, covering about 1,177,000 workers.¹

Apart from conditions of work altogether, the factory often constitutes a social centre for the play of its members. In how many factories in America is there not a baseball or hiking club, in how many works in England is there not a football club, or even a debating club? The factory is a social unity, the members of which cling together voluntarily after the obligation to do so has ceased. The factory is, in fact, an *association*, an association constituted for economic ends, but having, in addition, as a sort of by-product, important social and civic functions.

So far, we have not mentioned the word "welfare," or the word "personnel." We have wished to emphasise that the human and social side of industry may develop, and has developed, freely and naturally without any instigation or stimulation from the outside. But having made that clear, we must recognise also that much is being done by the Welfare Movement in England, the Personnel Movement in America, and "Œuvres Sociales" in France to emphasise the human aspects of industry and to constitute of the factory a school of civic virtue.

The welfare or personnel movement in its most developed form aims at the harmonious development of industry as a living organism. The efficiency of the industry is sought, but not at the expense of the well-being of the worker. The welfare movement seeks to emphasise that industry is made for man, and not man for industry.

The first feature of the industrial order to which we devoted attention was its mechanical character. Now, as its second feature, we emphasise its ultimately human basis and ultimately human ends. Vigorous emphasis has been given to this truth by Mr. Oliver Sheldon.² "Industry

¹ National Industrial Conference Board, *The Growth of Works Councils in the United States*, p. 5.

² *The Philosophy of Management*, p. 27.

cannot be rendered efficient while the basic fact remains unrecognised that it is primarily human. It is not a mass of machines and technical processes ; it is a body of men. It is not a complex of matter, but a complex of humanity. It fulfils its function not by virtue of some impersonal force, but by human energy. Its body is not an intricate maze of mechanical devices, but a magnified nervous system."

§ 4. Specialisation of Function.—We must next ask, and this brings us to a consideration of the third principal feature of the industrial order, whether the specialisation of function characteristic of modern industrial production is consistent with the definitely human ends of industry.

Let us be clear, in the first place, that specialisation of function has always been characteristic, to a certain extent at any rate, of the life of man. "When Adam delved and Eve span" already there was division of labour and specialisation of function. As far back as we care to go in recorded or unrecorded history, we find a recognition that men are not all alike, that some are talented in one direction and some in another, and that it is to the advantage of the community that each should specialise in what he can do best. In Cnossos there is already a sharp differentiation between the workers in brass, the workers in wood, and the workers in clay. And even within these industries, there is already a specialisation of function ; the different crafts begin to emerge. Among primitive peoples this specialisation of function is often connected with the recognition that if a man is defective in some particular way he may show special excellence in another. "Hephaestos among the Greek gods was lame ; so he becomes a blacksmith and uses his arms. Homer is blind ; so instead of fighting he sings of war."¹ And Xenophon argues that the best work is done when each man confines himself to one single department, as when one man makes shoes for men and another for women : "the king's cooking is much better than any-

¹ A. E. Zimmern, *Nationality and Government*, p. 180.

body else's because he has one cook who only boils meat, another who only roasts it, one who only boils fish, another who only fries it." Specialisation, thus early exemplified, has been the mainspring of the development of the social economy and, indeed, of all industrial progress.

It was not by chance that specialisation has always been recognised to be necessary, and that its logical basis has been enshrined in the proverbs of the people: "Practice makes perfect"; "If at first you don't succeed, try, try, try again." The significance of specialisation in work depends on the psychological and physiological basis of human nature. And the psychological and philosophical justification of specialisation of function is that by a process of habituation the man who is always doing the same thing acquires a special skill or a special knack in doing that thing.

Specialisation of function is, then, no new thing. It is as old as man himself, and it is based on his fundamental mental, moral, and physical characteristics. What is new is the *extent* to which the principle of specialisation of function is carried in modern industry.

The tendency of modern industry is towards a more and more elaborate sub-division of processes. The modern workman is a specialist not in a particular industry, nor even in a particular branch of that industry, but in a single tiny process in a single craft.

From the standpoint of citizenship and the community, what are the advantages and disadvantages of the division of labour as manifested in modern industry?

Its broad advantages from the standpoint of the economic interests of the community as a whole are generally recognised and may be briefly summarised.

In the first place, it gives an opportunity for the best use of natural capacities. If all men were bound down to do the same work, the special aptitudes that they possess would never get a chance to be used. Hephaestus would

not be a smith nor Homer a poet. It is an important principle of national economy to make the best possible use of human power.

In the second place, the principle of specialisation of function permits these special abilities not only to find an opportunity for exercise, but also an opportunity for the most efficient exercise. Adam Smith pointed out that a lad who had made nothing but nails all his life could make them twice as quickly as a first-rate smith who only took to nail-making occasionally. Habituation in a special task leads to efficiency. A large part of the process of training, industrial and otherwise, consists, as William James pointed out, in the transfer of as many actions as possible from the scene of conscious intellectual effort to the realm of instinctive and unconscious performance. It is clear that this process of converting conscious endeavour into unconscious action is enormously facilitated if the area within which it is applied is definitely circumscribed by the principle of the division of labour.

The third advantage of the principle of the division of labour from the standpoint of the community is that it renders possible the regular and continuous employment of a man on the work for which he is best fitted and the work in which he has been trained. It thus avoids, in theory at least, the waste involved in a man's going from one job to another, the actual time lost in the transfer and the time lost in working on a job with which he is not familiar.¹

Finally, but from the economic standpoint not least important, division of labour facilitates the continuous employment of the machinery with which the workman works. As a result of the increasing complexity of the

¹ It is, of course, notorious that in modern industry the possibility to which attention is here directed is very imperfectly realised. The actual waste involved at the various stages in the process of industrial production, and its relation to the problems of citizenship, will be examined in a later chapter.

industrial order, the capital sunk in machinery is showing a constant tendency to increase. If, then, overhead charges are to be kept at a reasonable level, machinery must be operated as continuously as possible. It was this consideration which was chiefly responsible for the late Lord Leverhulme's famous plea for a six-hour day.

But do these general economic advantages of the principle of specialisation of function, which are undoubted, extend to the individual worker ?

A negative answer is often given to this question by those who are opposed to the whole industrial system. They assert that the personality of the individual workman is starved by the system. In the first place, they say, the system tends to eliminate any kind of skill from industry ; in the second place, it destroys the pride which the worker used to take in the products of his hand ; and finally, it imposes on the workers unrelieved monotony of toil.

These criticisms are clearly of the utmost gravity from our special standpoint of citizenship. What is the advantage of a quadrupled national dividend if the life of the producers is impoverished or even poisoned at its source ? What doth it profit a man if he gain the whole world and lose his own soul ?

These criticisms must therefore be submitted to the most careful examination.

Is it true, in the first place, that the system tends to eliminate skill from work ? A direct denial comes from Henry Ford, in whose factories the modern industrial system is to be seen in the most developed form it has yet assumed. " I have heard it said," he writes, " in fact, I believe it is quite a current thought, that we have taken skill out of work. We have not. We have put in skill. We have put a higher skill into planning, management, and tool building, and the results of that skill are enjoyed by the man who is not skilled." ¹

¹ *My Life and Work*, p. 78.

And again, "In and out of industry there must be jobs that take the full strength of a powerful man; there are other jobs and plenty of them that require more skill than the artisans of the Middle Ages ever had. The minute subdivision of industry permits a strong man or a skilled man always to use his strength or skill. In the old hand industry, a skilled man spent a good part of his time at unskilled work. That was a waste."¹

If it is considered that Ford is hardly an impartial witness, take the evidence of an economist, Professor J. Harry Jones. Professor Jones points out that while the first effect of the introduction of machinery is to necessitate the employment of people on comparatively unskilled work, yet, as the work becomes more and more mechanical, the proportion of unskilled labour required is reduced rather than increased. But every considerable improvement of machinery and enlargement of plant calls for an increase in the number of indirect workers, such as mill engineers, cranemen, joiners, repairers, etc., most of whom are skilled craftsmen. Moreover, the commercial and managerial functions of the undertaking become more exacting and absorb a relatively larger amount of labour. "If a nation enjoys real economic progress," concludes Professor Jones, "purely manufacturing industries begin to absorb a diminishing proportion of its total labour force. Thus, while it may be true that in some industries the demand for unskilled workers is growing relatively to the demand for skilled workers, and that in more cases skilled craftsmen employed in particular trades are *relatively* less in demand, it is at least doubtful if the proportion of labour as a whole which is required for unskilled work is on the decrease."²

We may now pass to examine the second criticism of division of labour in the modern industrial order, namely, that it destroys the pride which the workman used to feel in the product of his hand. No one would wish to deny

¹ *My Life and Work*, p. 208.

² *Social Economics*, pp. 9-10.

that much that was good in the old ideals of craftsmanship has disappeared with the disintegration of the crafts. There was something fine in the boast of the craftsman that no other wares could rival his own. Let this be admitted to the full.

But a protest must be entered against the ignorant sentimentality which pretends that all the worker's interest has necessarily gone out of his work because he no longer, like the craftsmen of the Middle Ages, produces "single masterpieces." Long before the industrial era, it was common for the average craftsman to take an interest, not merely or primarily in his individual product, in the part which he had contributed to the whole, but in the whole to which he had contributed. The masons and carpenters who worked on the great cathedrals of the Middle Ages did not each produce "single masterpieces." They did honest work which, in combination with the honest work of thousands of others, resulted in a masterpiece.

At the present day, the worker very rarely produces a "single masterpiece." The conditions of modern large-scale production do not permit it. But there is no reason, merely on that account, why the worker should not feel pride in his work. He can, and usually does, feel pride in the total result of the work of himself and his mates. All the workers who contribute to build a ship or an engine or a motor-car take a personal pride in the product to which they have contributed. Further, it is a matter of common experience that the workman takes a pride in the machine or machines with which he works. I have rarely failed to find, in visiting industrial enterprises, that the workers took pleasure in explaining the mechanism of the machines which they were tending, and more particularly in drawing attention to the capacity of the machine and its superiority over other kinds. Conversely, in certain cases I have found that where the machine was an out-of-date model, the worker seemed to feel a sense of personal shame at having to work with it.

It is a curious reflection that while writers of a certain school sentimentalise over the deleterious effects of specialisation of function in the case of industrial workers, they never suggest that the specialisation of function which has been taking place in the professions has similarly harmful effects on those who practice these professions. Two professions in which specialisation has recently shown a marked tendency to increase are those of medicine and education. Only about half-a-century ago the teacher was generally quite unspecialised. The same person taught all subjects that the child was supposed to need to know. There is now a gradually increasing tendency to cause teachers to become specialised in one particular subject and to teach nothing but it. And in the case of medicine and surgery the tendency is even more marked. Individual doctors devote themselves exclusively to diseases of the eye, or to diseases of the throat and nose. Individual surgeons specialise exclusively on abdominal operations or on cranial operations, and so on. It is universally recognised that such specialisation of function benefits the patient, and it has never been seriously maintained that it injures him who practices. Those who hold the view that a diversification of work should be obtained at all costs, should in logic pity the Harley Street specialist who spends all his days doing nothing but examining people's eyes, while the happy "general practitioner" is free to range at will over the whole anatomy. In fact, however, the contrary is the truth. The general practitioner is commiserated with for being a "jack-of-all-trades," and the specialist is venerated as an "expert."

And there is no reason in the world why one criterion should be applied in considering manual work and another in considering intellectual work. Why should we revere the old-time blacksmith who considered himself able to do any kind of work with iron, and pity the modern factory worker who spends all his time on one operation? The truth is that the blacksmith of old-time was very often an inefficient

"jack-of-all-trades," while the modern specialised worker is in his own limited field a real "expert." And this is true, not only of the "skilled" worker, but also of many unskilled or semi-skilled workers with automatic machines.

It is, indeed, true that specialisation, inasmuch as it implies limitation, involves a certain lessening of scope for what may be called extensive interest. Where work is specialised the work does not satisfy the man who possesses a wide-roving mind. But the more narrowly work is specialised, the more it calls, not always but often, for intensive interest. Most kinds of modern specialised work call for very close intensive interest or attention.

But it should be clear that any claim that a man's work should completely satisfy his extensive interest is an irrational claim. It is impossible that a man's work should completely satisfy the interests of a vigorous mind. His work can only satisfy one aspect of his complex self. We would all agree with William James, who has put the point very vividly: "Not that I would not, if I could, be both handsome and fat and well-dressed, and a great athlete, and make a million a year, be a wit, a *bon vivant* and a lady-killer, as well as a philosopher; a philanthropist, statesman, warrior, and African explorer, as well as a 'tone-poet' and saint. But the thing is simply impossible. The millionaire's work would run counter to the saint's; the *bon vivant* and the philanthropist would trip each other up; the philosopher and lady-killer could not well keep house in the same tenement of clay. Such different characters may conceivably at the outset of life be alike *possible* to a man. But to make any one of them actual, the rest must more or less be suppressed." ¹

It is only the dilettante, the amateur, who can attempt to satisfy his different selves, or the different aspects of his self, in what he regards as work. The real workman, whether manual or intellectual, in the modern world, knows

¹ *Principles of Psychology*, I., 310.

that if he is to produce good work he must severely circumscribe the range of his activities, and confine himself to one particular job. In the modern world, the intellectual worker can no longer pretend, as did the Admirable Crichton, to be an authority *de omni scibili*, nor can the manual worker claim as carpenter or smith to know all that is to be known of work in wood or metal.

The criticism is frequently made that if we accept this as true, it banishes from life the possibility of self-expression in work, or of creative work. But what precisely do we mean by self-expression in work? Such a term would refer to work which really enabled the worker to express himself, his thoughts and beliefs and ideals, in his work. But of how many kinds of work, even under the most ideal conditions, can it be said that it permits self-expression? Only of certain of the Arts. It can be said without exaggeration that the preacher, the artist, the musician, can express themselves in their work. Their work is really creative. But how far is the work of the doctor creative? How far does he express himself in it? And if we admit that the doctor's work often involves creation and self-expression, can we say the same of the dentist's? We say that the woodcarver's work is creative, but would this term generally be applied to the work of the pattern-maker? And yet the pattern-maker, constructing a matrix destined to produce hundreds of thousands of copies, is in one sense genuinely creative. The terms "creative work" and "self-expressive work" are thoroughly dangerous. As commonly used, they are not clearly defined, and it would, indeed, be extremely difficult to give them any precise definition. In any order, the amount of really creative work possible is very small. And even the man who has the capacity for "creative" work must necessarily do a great deal of routine work. After the creative afflatus has passed, the details of execution must be carried out. Even in the "Sistine Madonna" there is a great expanse of plain blue sky which must have been

monotonous to paint. The fact is that in all work, even the highest, there is much routine and monotony. The "creative" mind girds at the monotony of his work, but the ordinary man takes it as it comes and finds it not unpleasant.

The argument in the last page or two has already led us to the verge of the third main question which we wish to examine, namely, the extent to which monotony of work is necessarily implied in the modern industrial order.

Repetitive work is a necessary characteristic not only of modern industry, but of all industry. It must, indeed, occur whenever a worker is occupied in the successive production of articles of the same kind. In respect of repetition, the only difference between the modern operator and the mediæval craftsman is one of degree.

The degree is, of course, considerable. When the craftsman was responsible for the making of a complete article, the cycle of repetition was usually so long that it contained within itself all the elements of variety. The position is admittedly different now, when the cycle of repetition may consist of but a fraction of a second.

"Nevertheless," to quote the words of a report of the Industrial Fatigue Research Board,¹ "even under modern conditions and in occupations which seem to be carried out with the greatest regularity and uniformity, our experience of human performance would suggest that the given task is not repeated again and again with mechanical precision, but that some variety must be introduced to meet the conscious and unconscious demands of the operative."

The extent to which this conscious or unconscious interpolation of change occurs under factory conditions has been studied by Dr. H. M. Vernon by actual observation of workers engaged on repetitive process. In the report already referred to, Dr. Vernon shows that the cycles of

¹ Report No. 26, *On the Extent and Effects of Variety in Repetitive Work*, 1924, p. iii.

repetition do not form an unbroken series, but that a certain degree of variety is provided either by changes in activity, short interpolated rest pauses, or changes in posture.

It would thus appear that complete uniformity in the repetition of the same process is already spontaneously avoided by the workpeople, or that while the actual process remains the same, changes are introduced in concomitant circumstances which tend to prevent monotony.

An interesting result of the investigation conducted by Dr. Vernon into various operations where activity is highly repetitive is to show that full advantage is not taken of the opportunities afforded to workers to introduce variety by changes of posture, etc. Take, for instance, an occupation consisting in fixing tops and bottoms to tin canisters. The girls employed worked in teams of four, two of the girls always standing at their work, whilst the two who controlled the machines always sat. All the girls were competent to undertake both the sitting work and the standing work, and the management encouraged them to change places at each rest pause. Counting the dinner-break, there were six occasions on which they could change. As a result of observations made, 160 sets of data were obtained. It was found that on 14 occasions a girl made the maximum number of six changes, whilst on 55 occasions a girl made four or five changes, and on 40 occasions three changes. On the other hand, girls did not change places at all on 17 occasions, and changed once or twice only on 34 occasions. By many of the girls, therefore, the opportunities for change were not used, a fact which would appear to show that by many this intensely repetitive work was not felt to be monotonous.

This conclusion is reinforced by further evidence collected by Dr. Vernon in the same factory. In the process of feeding canister-tops into multiple-die machines, a group of 23 girls were found to sit for 96 per cent. of the time they were at

the machines, and to stand for 4 per cent. of it, though they could work equally well in either position.

In other evidence obtained at a soap works, where teams of girls were engaged in wrapping cakes of soap, it was shown that there was a great difference between the individual preferences of girls. During a period of work of one hour, the two girls at one machine stood for forty-eight and forty-four minutes respectively, whilst those at another did not stand at all. At a third machine, one stood for three minutes and the other for forty minutes, while at the fourth machine one stood for seven minutes and the other for twelve minutes.¹

The result of these investigations is to show that, in certain cases where opportunities exist for the workers to introduce themselves some change into repetitive occupations without prejudice to the efficiency of the work, this option is exercised either capriciously or practically not at all. And it would seem a reasonable deduction from this that these changes are not introduced by the worker because the processes of repetition are not, in fact, felt to be monotonous.

This conclusion receives further confirmation from the results of an investigation made by Mr. S. Wyatt for the Industrial Fatigue Research Board² into the conditions of work in the establishment of a firm of manufacturing chemists, where the operations on which the workers were employed were frequently changed during the course of the day. According to Mr. Wyatt, "although (the workers) appreciated the changes from one process to another, they preferred the larger orders where the changes were less numerous."³

Further evidence that repetitive work is often not in fact felt to be monotonous by the workpeople engaged on it is quoted by Münsterberg.⁴ One example is the case of a

¹ Report cited above, p. 10.

² Results published in Report No. 26, above mentioned.

³ *Ibid.*, p. 21.

⁴ *Psychology and Industrial Efficiency.*

workman who pushed strips of metal forward into a hole-cutting machine and thus made 34,000 uniform movements daily. He had been doing this work for fourteen years, and found pleasure in it. And Münsterberg's evidence is borne out in an even more striking way from wide and personal experience by Henry Ford. "We shift men," Ford writes, "whenever they ask to be shifted, and we should like regularly to change them—that would be entirely possible if only the men would have it that way. They do not like changes which they do not themselves suggest."¹

In cases where the workers feel the monotony of work, this monotony does not necessarily reside in the work itself: it is often, perhaps usually, due to emotional considerations and circumstances outside the work itself. This is remarkably exemplified by the experience of Miss May Smith, an investigator to the Industrial Fatigue Research Board, cited by her in one of the publications of the Board.² "The writer had recently to spend some time in two factories doing the same repetitive work; in the one there were many complaints of dullness, in the other none; in the one the majority of faces expressed a dull acquiescence in existence, in the other the general happiness and joy in the work were obvious. If a study of repetitive work done in these two factories had followed the same lines, the results would have been different. In the one, no one apparently took any interest in the workers, there was no *esprit de corps*, and a general slackness prevailed; to get the week's money was the only interest, and that is bound to be a fitful interest. In the other, there was not only a real interest in the work, in the accumulation of it as the day wore on, but also a desire to win the approval of the authorities and interest in many social activities binding one to another. The repetitive work is a thread of the total pattern, but not the total pattern."

¹ Ford, *My Life and Work*, p. 105.

² *Fourth Annual Report*, 1924, p. 30.

From the standpoint of citizenship, these conclusions are highly encouraging. They suggest that monotony is not felt to result from the actual repetitive process so much as from the general atmosphere of the factory. This is, as we have said, encouraging, because while modern industry essentially involves repetitive process, it does not necessarily involve a depressing and discouraging factory atmosphere. Repetitive work cannot be changed, but factory conditions can.

It is encouraging also to remember that monotony is not an objective quality of things but a subjective feeling of persons. In other words, work is not monotonous till it is felt to be so. Now it is well known that work which to one person is intensely interesting to another involves deadly monotony. In the professions every one would agree that this is so. The stockbroker may take intense interest in his work, but to the artist it would be unbearably monotonous. And in manual work the same truth holds. "It is no uncommon thing to hear the worker on one process stigmatise some other process as monotonous and vehemently declare he could never 'stick it,' when to the observer of both there was nothing to choose between them."¹

The monotony of labour is usually emphasised, not by the workers themselves, but by writers or social reformers who are temperamentally fond of change and variety. And it may be suggested that it is an example of the "psychologist's fallacy" to believe that the majority of the workers regard the sameness of their work as any special drawback. "In every social stratum there are many folk who do not care to use their brains much; they just want to carry on, week after week, doing the same things, day-dreaming perhaps during their day's work. That is to say, a more or less monotonous occupation is actually welcomed by some

¹ *Fourth Annual Report of the Industrial Fatigue Research Board*, p. 30.

people, just as there are others who cannot exist without variety." ¹

If, whether in manual or in intellectual work, people are given an opportunity to do the kind of work that suits them, it is probable that however repetitive the work is, it will not be felt to be monotonous. The tendency to reduce all work in modern industry to repetition is as much to be defended, from the psychological standpoint, as the tendency to reduce the common actions of life to the purely habitual. And the argument in both cases is the same. By rendering such common actions in life as rising in the morning, washing and shaving purely habitual, energy is conserved for other purposes. Similarly, the reduction of industrial processes to the repetitive and habitual conserves the energy of the worker for other interests outside his working life. And that is why the study of citizenship is particularly important in the modern world. We know how to live our lives at work in the factory, but we do not know how to live them outside the factory. It is outside the factory, not inside it, that variety is needed.

It is certain that the conditions of modern factory life are such that some outlet is needed for the superfluous energy that is not used up in labour and for the desire for change that is not satisfied by repetitive work. Repetitive occupations, so long as the worker is healthy in body and in mind, necessarily lead him to seek variety, and even adventure, in his hours of leisure. This desire for change and adventure is by no means necessarily vicious. Writers on social welfare frequently suggest that social and industrial "unrest" is some sort of disease that should be cured. Nothing could be more mistaken. It is true that the desire for change and adventure in leisure hours sometimes leads the worker to gambling, drunkenness, or sexual immorality—precisely as the same desire leads the gilded young-man-about-town into the same courses. There is no difference at

¹ C. S. Myers, *Mind and Work*, pp. 20-21.

all. In both cases superfluous energy seeks an outlet, not necessarily as a protest against anything in particular. Owing to the lack of the development of reasonable ways of employing spare time consistently with the principles of citizenship, the socially undesirable forms of leisure enjoyment naturally flourish. The fault cannot be laid at the door of industrial organisation. It is due to our failure to study the implications of citizenship and particularly the development which can be given to it in the increased spare time which the improved organisation of industry has provided.

A clear distinction must therefore be drawn between monotony of work and monotony of life. "It is monotony of life much more than monotony of work that is to be dreaded: monotony of work is an evil of the first order only when it involves monotony of life."¹ There are undoubtedly some kinds of work, though a decreasing number, which can never be made pleasant in themselves. But even if such work is "mere toil," in which monotony is almost necessarily felt, it does not follow that the whole life of the worker must be overshadowed by monotony. In his life outside the factory, that relaxation may be found which will contribute, together with the discipline of the factory, to the development of the highest forms of citizenship.

§ 5. Centralisation.—But perhaps it will be said, You have indeed defended the modern industrial order against the charge that it necessarily involves monotony of work. But you have succeeded in doing this only at the expense of an admission of the utmost gravity. Monotony of life, you assert, and not monotony of work is the soul-destroying thing. But is not the monotony of life itself a consequence, and a necessary consequence, of the industrial order with its excessive centralisation of factories and therefore of

¹ Marshall, *Principles of Economics*, p. 26.

population? Is not the environment in which the industrial worker lives inimical to all that makes life worth living?

There is, of course, no doubt that the industrial order has involved an extraordinary geographical concentration of the population.¹ In the earlier stages of the industrial revolution this geographical concentration was greatly encouraged by the successive inventions of new types of machinery. It is true that as early as the beginning of the eighteenth century a tendency was observable for manufacturers to migrate to particular districts, but this was immensely accelerated by the introduction of machinery.

The precise causes of the centralisation and localisation of industry vary greatly, and sometimes it is only with difficulty that they can be discerned. There are, however, four general types of cause which may be broadly distinguished, namely: (1) Availability of raw materials; (2) convenience to markets; (3) suitability of climatic and other conditions; and (4) accessibility of sources of power. While in the development of localised and centralised industry all these factors have played a part, by far the most important is accessibility of sources of power.

In a relatively early stage of industrial development industries will be apt to grow up, other things being equal, in areas in which the raw materials with which they work are plentiful. The smelting of iron will be done in proximity to the iron mines, the making of pottery in the neighbourhood of the necessary clay deposits. But as time goes on, as transport develops, it is found more economical to bring the raw materials to the source of power, rather than the source of power to the raw materials. The iron industries in England, for example, migrated at an early date to those areas in which a plentiful supply of charcoal could be had,

¹ Such geographical concentration is, however, by no means confined to countries in which the industrial system is highly developed. In China, for instance, a non-industrial country, there are more intensely concentrated cities than any other country in the world.

and afterwards moved to the neighbourhood of collieries. Similarly, all the raw materials for the making of Staffordshire pottery are brought to Staffordshire from long distances, because cheap and suitable coal is to be had there. The tendency of an industry to follow geographically its sources of power is well illustrated in the development of the English woollen industry. "So far as the cloth trade was concerned, the trend appears to have been due to the facilities which water-power afforded for pulling-mills; and as one invention after another was introduced, it became not merely advantageous but necessary for the manufacturer to establish his business at some place where power was available. We have in consequence the rapid concentration of industries in the West Riding and other areas where water-power could be had, and the comparative desertion of low-lying and level districts. The application of steam-power caused a further readjustment in favour of the coal-producing areas; but this new development did not resuscitate the decaying industries of the Eastern Counties, since they were as badly off for coal as they were for water-power.¹

Centralisation of industry has also been due in certain cases to ready accessibility to markets. In London are to be found all sorts of manufactures in which there is a large export trade, not because raw materials are cheaper there than elsewhere, not because power is more abundant, but simply because of the ready accessibility of London to the markets of the world. And the same is true of cities like New York, Philadelphia, Chicago, Calcutta, Bombay, and Shanghai. These cities are not merely international marts, though their exchange and transshipment activities are extremely important; they are also themselves important manufacturing centres, and they are this because the goods manufactured have ready access to the markets of the world.

¹ W. Cunningham, *The Growth of English Industry and Commerce*, III., 615-616.

In other cases, the localisation of industry is due to climatic and other factors not connected either with raw materials, sources of power, or markets. It would be impossible to find a more striking example of such an industry than the Lancashire cotton trade. In Lancashire is spun and woven American and Egyptian cotton to supply the needs of the Indian market. Lancashire is not near the sources of the raw materials. It is far from its market. It has no special advantage from propinquity to sources of power. Why, then, the localisation of the cotton trade in Lancashire? The answer is the peculiar humidity of the atmosphere, specially suitable for the finer counts. Why, to take a more recent instance of industrial localisation, do we find a concentration of cinema film production in California? Undoubtedly because of the clearness of the atmosphere and the excellence and reliability of the weather. In other cases, centralisation may be due to factors more difficult to classify. For instance, the localisation of the cutlery trade in Sheffield is stated to be due chiefly to the excellent grit of which its grindstones are made. Such instances, however, are relatively rare.

The main conclusion that may be drawn from this rapid survey is that by far the most important causes of localisation and centralisation of industry have been propinquity to power and convenience to markets. And this has meant, in the development of the industrial order, propinquity to coal-fields, for coal has been the chief source of cheap power,¹

¹ The tremendous impetus given to industrial development by the use of coal has been picturesquely indicated by Dr. Frederick Soddy: "All forms of energy previously utilised by life, with one or two minor exceptions, as tidal energy and that of hot springs, were forms of the solar revenue. Wind-power, water-power, and wood-fuel are parts of the year to year revenue of sunshine no less than cereals and other animal foods. But when coal became king, the sunlight of a hundred million years ago added itself to that of to-day" (*Cartesian Economics*, p. 10).

and accessibility to the sea, for the sea is the common highway which leads to all the markets of the world.

From the standpoint of citizenship, this conclusion is of the first importance. For some of the worst of the social effects of the industrial order have been due to the excessive overcrowding of the people in the cities of factories which have sprung up near coal-fields and at seaports. The people have been forced by the centralisation of industry to live in dingy tenements under skies perpetually obscured by curtains of smoke. Under these circumstances, the realisation of the genuine ends of citizenship has been impossible either in work or in leisure.

Fortunately, however, for the development of the social ends of the community, tendencies are already at work within the industrial order itself which will lead to the gradually increasing decentralisation of industry. We can already descry the industrial system of the future. Industry will still continue to be highly standardised, and its operations will still continue to be minutely subdivided. What will disappear will be the excessive herding together of factories and industries.

What are the tendencies which can already be discerned as contributing to the decentralisation of industry? The first, and an obvious one, is the growth of land values in urban areas. Scarcity of land in the already overcrowded centres naturally leads to keen competition among potential users with resulting rising prices. The point has already been reached in many urban areas in the United States, Great Britain, France, Germany, and elsewhere, at which it is more economical for the industrial employer to build and work his factory at some distance from a large city. Some of his expenses, for example, transport, are probably heavier than they would be in the city, but these are more than counterbalanced by what he saves on overhead expenses.¹

¹ An interesting development in the direction of decentralisation has recently been taking place in the Ford plants on the River

The second important influence in favour of industrial decentralisation is improvement in transport. Cheap and rapid transport permits of the establishment of factories at a distance from raw materials, power, or even markets, where other conditions are favourable. And cheap and rapid transport, and particularly the cheap motor-car, permits the workers in a factory and a city to spread themselves over the face of the countryside in a way that would not have been thought possible twenty or even ten years ago. In England this tendency has been chiefly marked in the case of the middle classes, but in the United States it is a usual thing for the manual worker to live twenty miles from his factory and to come in to work in his motor-car.

But the most important influence in favour of decentralisation is the use of electricity as the source of power. Recent experience has shown that electricity can be conveyed long distances more cheaply than any other source of power. Where any extensive use of it has been made for the provision of power for manufacturing processes, the tendency has been marked towards a decentralisation of industry.

Although the application of electricity to industrial development is comparatively recent, the economic and social

Rouge, at whose mouth stands one of his enormous factories. He has built dams at intervals on the stream, and at each dam the necessary power plant and factory. Some of these factories are tiny—at Nankin Mills only seventeen men are employed making with automatic machines carburettor parts. They constitute, however, parts of a definite system. According to this scheme, the various plants for manufacturing parts are situated on the headwaters of a stream and the assembling and shipping plant at the outlet. "Our idea," says Ford, "is to distribute plant around rather than distribute the power." Whether plant is distributed or power, there is a definite tendency to decentralisation, which, while not due primarily to altruistic motives, is full of consequences of the greatest importance for the development of citizenship.

results already attained are very remarkable. A glimpse of these results is provided by the experience of the Province of Ontario and the State of California. These are the two areas on the world's surface where the most comprehensive and successful endeavours have been made to extend the industrial and rural use of cheap electrical power. In both, the motives that prompted the experiment were alike, namely, absence of natural coal resources, and proximity of vast supplies of potential water-power, and in both the results, both economic and social, have surpassed expectations. In the course of fifteen years, cheap electrical power, obtained mainly from the Niagara Falls, has been distributed to almost every factory and every farm in Southern Ontario over distances up to 250 miles. This energy is supplied through the medium of the Hydro-Electric Power Commission which co-ordinates the co-operative action of more than 380 separate municipalities. The system, as described by Sir Adam Beck, the Chairman of the Hydro-Electric Power Commission of Ontario, is as follows: ¹ "The Commission generates or purchases electrical energy which it transmits to the associated municipalities. Each year it allocates the entire cost of the operation of each system among the respective partner municipalities, so that these contribute each its own proper and proportionate share towards the cost of operation. Each municipality owns its local distribution system and distributes the power to its individual customers." The 380 municipalities taking part in this enormous co-partnership have invested about \$250,000,000 in the common undertaking for the distribution of electrical energy to their citizens.

The Province of Ontario has not been content to supply power to its industrial towns, it has extended it even to isolated farms. When the farmers of rural Ontario called for "Hydro" service, the community recognised the justice of their claim, and at the beginning of 1924, the

¹ *The Survey*, March 1, 1924, p. 585.

rural lines approved by the Commission aggregated over 1000 miles, to supply about 14,000 consumers.

On the social effects of this service, the evidence of Sir Adam Beck is of interest. "Although the aggregate load of the electrical energy thus distributed to rural dwellers is relatively quite small, its influence on the economic life of the Province is already a factor of great importance. The problem of keeping the younger generation on the farm and making farm life attractive is greatly helped and in some cases solved by the coming of electrical service."¹

In California the development and utilisation of electric power has followed very similar lines in the motives which prompted it and the purposes it serves. If the Pacific Coast had depended on coal for its economic development, its industries to-day would have been almost non-existent. The nearest coal supply is Utah, nearly 750 miles away, and the next best source is Australia! Steps were therefore taken to develop its water-power through private initiative, and by the beginning of 1924 a continuous transmission line carried power over 1200 miles from Oregon through California to the Mexican frontier. Unlike Ontario, the Pacific Coast has developed its water-power through private power companies.

The results of the widespread and cheap use of electric power are as noteworthy in California as they are in Ontario. Mere figures of production are of little general interest. It conveys little to us to be told that the output of the whole transmission system in 1922 was over 4½ million kilowatt hours. It is more interesting to know that the industries of the State, in spite of the great Californian production of oil, are almost exclusively run by electricity. Indeed, oil is pumped from the ground by electrically-driven machinery. In the farms, too, its use is remarkably extensive. "It is no unusual thing to see a new farm cottage completely equipped with electrical appliances—lights, vacuum cleaners,

¹ *The Survey*, March 1, 1924, p. 590.

sewing and washing machines, water heater, cooking stove and refrigerator—at the same time the electric pump is installed to pump water, to irrigate the land, to raise alfalfa to feed the electrically-milked cows in the electrically-lighted barn.”¹

It is a striking evidence of the rapprochement between the industrial and the social standpoint that in certain recent investigations of the possibilities of electrical development, social aims are kept prominently in view. An example of this new standpoint is provided by the constitution of the Giant Power Survey Board by the State of Pennsylvania. The Director of this Survey, Mr. Morris L. Cook, stated that the enquiry would be based on a study of social needs. “We seek to find out,” he continues, “how power can be made to contribute to the fullness of life. We believe that electrical technology has advanced to a point where the use of current can be made so inexpensive as to revitalise the whole social fabric.”²

If electric power has so far been extensively used only in certain areas in which a stimulus has been given by lack of other kinds of power, it is certain that economic necessity, due to the rapid depletion of the world's stocks of coal and oil will make it essential to utilise these forms of energy, not in the present wasteful manner, but in the economical production of electrical energy.

Sir Philip Nash, discussing the economics of world power at the World Power Conference at Wembley in July, 1924, said the great problem facing scientists and engineers to-day was not the problem of fuel supplies, but of fuel economy. The efficiency of conversion from fuel to power even in the most modern power station was not more than 22 per cent., so that 78 per cent. of the available energy was lost. In Great Britain, only 3.88 per cent. of the potential power available from coal, oil, and water-power was being used,

¹ H. G. Butler, *The Survey*, March 1, 1924, p. 606.

² *The Survey*, March 1, 1924, p. 601.

while in the United States, Germany, France, Italy, and Switzerland the percentages were respectively 8.4, 6.0, 16.7, 32.1, and 36.2 per cent.¹

However great the economies practised, it is certain that within a measurable period the world's coal and oil deposits will become exhausted, and that its water-power will be insufficient for its growing needs. What of our industrial order then? If a glimpse into the future may be permitted, it would appear that we may still hope to have power, perhaps electrical, perhaps in some other form, which will be easily distributable over large areas and thus continue to contribute to industrial decentralisation. This, at any rate, is the view of Dr. J. B. S. Haldane: "Ultimately we shall have to tap those intermittent but inexhaustible sources of power, the wind and the sunlight. The problem is simply one of storing their energy in a form as convenient as coal or petrol. . . . Even to-morrow a cheap, foolproof, and durable storage battery may be invented, which will enable us to transform the intermittent energy of the wind into continuous electric power."²

§ 6. Capitalisation.—On its financial side, the most striking characteristic of the modern industrial system is not so much that its operation requires a large amount of capital as that this capital does not usually belong to those who control and direct the destinies of the various industries. There is, of course, no doubt that the foundation of modern industry is capital. Without capital the modern industrial system would tumble about our ears like a pack of cards. But from the standpoint of citizenship the important question to ask is: "Is this capital owned by the persons who direct industry?" or "Is the personal ownership of capital necessary to those who direct industry?" Broadly, and in a sense to be defined later, the answer to both these questions is in the negative. In the modern industrial system the function of directing industry is more and more

¹ *The Times*, July 3, 1924.

² *Dædalus*, pp. 23-24.

becoming divorced from the function of supplying the necessary capital. In this sphere also the principle of the specialisation of function and the division of labour is being applied. It is being more and more fully realised that the possession of capital and the possession of the qualities necessary to direct the "great industry" need not by any means necessarily be united in the same person. Tradition, indeed, would seem to prescribe that the capitalist and the director of the great industrial enterprise should be one and the same person. But in this, as in so many other spheres, the modern industrial order has broken with tradition. Striking examples are daily being presented to our eyes of men being selected to guide the destinies of great industrial corporations not because they are themselves large capitalists or have any traditional connection with the business world, but purely and simply because of their organising and directing abilities.

And in many cases the directors of industrial enterprises, even if they are large capitalists, do not have important sums invested in the undertakings which they direct. Their private capital may be spread over a large number of other enterprises in which they have no other interest and control than that of any other shareholder.

The increasing tendency to a divorce between the ownership of capital and the direction of industry is made possible by the development of the joint stock company. Before the evolution of the joint stock company, the person or persons who, as partners, directed and controlled large undertakings themselves supplied the necessary capital. Even the great trading companies of the seventeenth and eighteenth centuries were not joint stock companies as we know them. They were associations of merchants formed to share the peculiar risks involved in foreign trade with such distant regions as the East Indies or Hudson's Bay. They were, in fact, simply extensions of the private partnership. The joint stock company, on the other hand, has, as

its essential characteristic, the employment of the capital of a large number of people who do not share in the control of the company otherwise than as shareholders. The ordinary citizen who has a hundred pounds or less of savings may buy shares in a company whose capital runs into millions, and to the extent of his share in the company, may participate in all its successes and enjoy all its prosperity. And if adversity should befall, his liability to share in this adversity is limited to the extent of his holding in the company. He may lose all he invested in the company, but he cannot lose more. In this respect his position is infinitely better than that of the partner in a private business who, if anything goes wrong, is liable to the extent of the whole of his private fortune. Further, the holder of shares in an ordinary joint stock company is able, thanks to the institution of the Stock Exchange, to sell these shares at any time and to use the cash obtained from the sale for special needs or for further investment.

The development of the joint stock company has therefore immensely facilitated the task of the ordinary citizen with small savings, who is unable or unwilling himself to make productive use of them. If the joint stock company or something analogous did not exist, the ordinary citizen would be compelled to deposit his savings with the banks or buy Government bonds. In both cases he would not only be forced to be content with a lower rate of return on his money than he can obtain by direct personal investment, but he would be deprived of the intellectual interest which immediate participation in industrial enterprises is capable of inspiring.

The whole tendency of modern industry is in the direction of increasing the number of those who have a stake in it. In a certain number of industries, not only in Great Britain but in other countries, systems of co-partnership and profit-sharing have been introduced, with a view to enabling the workers employed in an industry to have a share in its

capital and in its profits. In America, the Federal Trade Commission reported in 1926 that employee stockholders comprised 7·5 per cent. of the common stockholders and 35 per cent. of the preferred stockholders.¹ In 1919, in Great Britain, the number of employees participating in profit-sharing schemes, as reported to the Ministry of Labour, was 243,050. On June 30, 1921, this figure had risen to 300,195.² These figures, while small compared with the total of workers employed, show that the profit-sharing and co-partnership movement is not a negligible factor in what may be called the ramification of the capitalisation of industry.

Apart, however, from such systems of profit-sharing and co-partnership, the area over which the holding of the capital of a company is spread is rapidly increasing. Attention was drawn many years ago to this tendency by Simkhovitch in his penetrating criticism of Marxism, and the tendency has been increasing very rapidly in recent years. According to the statement of the Chairman of the London, Midland and Scottish Railway Company, at its 1924 annual meeting, the individual shareholders in this one joint stock company number over 250,000.

Now this spreading of the holding of capital may be regarded as a real step in the direction of the democratisation of industry. The shareholder, however small his holding in an industrial company, exercises some influence, if not directly on the control of the company, at least, as a citizen, on the formation of public opinion. And the educative value of the holding of shares is also of importance, not only to the individual shareholder but also to the community. The professional or working man who holds a few shares

¹ Federal Trade Commission, *Summary of the National Wealth and Income*, 1926. See also W. J. Lauck, *Political and Industrial Democracy*, pp. 105-112 and 353-374.

² *Report on Profit-sharing and Labour Co-partnership in the United Kingdom*, 1920, Cmd. 544, p. 26; and *Labour Gazette*, Sept., 1921.

in a Ceylon tea company, a Perak rubber company, or a South African mining corporation, may find himself taking an interest not only in the dividends which he receives but also in the general progress of the tea, rubber, and gold mining industries and in the general development of Ceylon, the Malay States, and South Africa. This educative value of shareholding is, of course, a by-product. But the importance of the by-product is one of the most important discoveries of the modern world.

But the joint stock system, while it has advantages from the standpoint of citizenship, is not free from what, in a social aspect, cannot be considered as other than serious defects.

(a) *Cash Nexus*.—The joint stock system involves, in the first place, an emphasis on the cash nexus as the only real relation between the company and its employees. In the old private company a relation of personal friendship often subsisted between the employer and his workmen, and in any case the employer was personally known to his workpeople. In the modern joint stock company, the real proprietors of the company, the stockholders, never come into contact with the employees at all, with the result that the employees, with the feeling that they are working for an impersonal mechanism with which they have no personal relations, may cease to work with heartiness and spirit. The employees feel that they are not working as citizens. They consider that the shareholders for whom they work are not only functionless, in the sense that they make no personal contribution to the carrying on of the enterprise in which they are shareholders, but are also interested in its destinies only temporarily and in accordance with the vagaries of the stock exchange.

This is undoubtedly a serious social defect in the joint stock system. The efforts that have been made, particularly in the United States, to introduce the "human touch" or the "personal factor" in the relations between the

company and its employees have not, on the whole, been very successful, partly because it has been suspected by the worker, and sometimes at least with reason, that the introduction of the "personal touch" was a device to engage his loyalty without imposing any really sincere corresponding obligations on the shareholders.

(b) *Concentration of Control*.—The limited liability of the shareholders in a joint stock company has the effect of limiting the risk of the investor to the capital which he puts in the company. This limited liability of the shareholder naturally diminishes his sense of responsibility for the activities of the company. The shareholder in a company does not in general feel any sense of personal responsibility for the conditions of employment which an oil company in Mexico imposes on its employees. His sense of responsibility is limited because his actual power is limited. The control of the policy of the company is exercised by the Board of Directors, who once a year nominally submit their work to the approval of the shareholders in the annual meeting. And it is a commonplace that effective control is rarely exercised by the shareholders' meeting.

This is unfortunate, particularly from the standpoint of citizenship. For it is certainly one of the privileges, as it is one of the duties, of the citizen to make his individual influence felt on the management of any company in whose activities and destinies he has a financial interest.

The constitution of the modern joint stock company is, in theory, based on precisely the same principles of representative government as the modern State. In the Great Industry, as in the Great Society, the size of the unit makes it impossible for the individual member of the State to participate directly in government (as was possible in the Greek City-State) and equally impossible for the individual member of a company to participate in its management (as did merchant-companies or partnerships prior to the Industrial Revolution). In both cases, therefore, constitutions

on identical principles were devised, according to which the members of the State or the members of the industrial company elected from among their own number men to represent them in the government of the State and the company respectively. And the defects in representative government as it has manifested itself in the working of the State have undoubtedly also been evidenced in the functioning of joint stock industry.

In both cases the need of to-day would appear to be the same, a stimulation of the sense of common citizenship, with its system of rights and duties. The citizen, whether as member of a State or as shareholder in a company, must exercise the rights which are granted him by law and fulfil the duties which are imposed upon him by the social conscience.

In spite of the social defects of the joint stock system, there seems little doubt that, on any wide survey of the needs of the community, it is better adapted to encourage citizenship than any other form of industrial organisation. The joint stock system, if certain reforms which are consistent with its essential nature are introduced, is a powerful instrument in the direction of widening the basis of industry and of ensuring that all those engaged in it may participate in loyalty to themselves, to it, and to their own common citizenship.

§7. Marketing.—One of the most significant features of the modern industrial order is the development of marketing. The middleman is the bridge between the producer and the consumer, and with the growth in the size of the industrial unit his importance is an ever-increasing one. In 1911 one-sixth of the occupied males in the United Kingdom were engaged in one form or other of dealing, and the wealth of these dealers was probably much greater proportionately than their numbers. The "middleman" cities, too, the great centres of marketing and exchange, such as London and Paris, are much richer than the producing cities, such as Birmingham and Lyons.

The number and the wealth of the middlemen, on the one hand, and on the other the amount they are responsible for adding to the price of an article between the wholesale producer and the final consumer, an amount which frequently reaches 50 per cent., 75 per cent., or even 100 per cent. of the original cost of production, have led to a widespread belief that the middleman is an anti-social person, that he is a parasite on society. Are his functions consistent with citizenship, or do they contribute to the development of citizenship in the modern industrial State?

It must be recognised, in the first place, that middlemen, or rather some middlemen, do perform useful functions in society, functions which benefit both the producer and the consumer. The main aim of the producer is to produce his goods in the largest possible quantity and at the highest possible profit. The aim of the consumer is to obtain his goods at the most convenient time and at the lowest possible price consistent with quality. There is thus a *prima facie* conflict between the producer and the consumer. In the first place, the producer wants to ask more for his article than the consumer wants to give. In the second place, the producer wants to go on producing his articles regularly, without regard to the desires of the consumer, while the consumer wants to obtain his articles at a given time. The boot-manufacturer, for instance, wants to be able to go on making boots regularly throughout the whole year, while the consumer wants to buy boots only when he finds that his old ones are worn out.

The main function of the middleman in industry is to act as a conciliator in this conflict between the producer and the consumer, just as solicitors act as intermediaries and conciliators in the conflicting interests of their clients. To be quite clear, however, as to the social services rendered by the middleman, we must examine in some detail the different functions he performs.

The economic function of the middleman is to be the

bridger, on the one hand, between the grower or extractor (producer) and the manufacturer (consumer), and on the other between the manufacturer (producer) and the ultimate consumer. The manufacturer has not the special skill required for getting into touch either with the producer of raw material on the one hand or with the individual consumer on the other. On each side of him there is a middleman or a series of middlemen.

Between him and the producer of the raw material there is a merchant who performs at least three functions. Suppose the commodity that is required is raw cotton. The middleman, in the first place, purchases it wholesale from the producer and stores it until it is required by the manufacturer. In the second place, he provides the capital necessary to bridge the time between purchase and sale, or makes the necessary arrangements with the banks to do so. It is he, finally, who is the great risk-taker, who risks a slump in the price of the commodity before he can sell it, who risks also a deterioration in its quality while it is in his stores or in process of transportation.

On the other side of the manufacturer, between him and the ultimate consumer, there is also a middleman, the retailer. It is his function also to buy in quantity from the manufacturer or from another middleman, the wholesale dealer, and to store the articles in his shop till they are required by the individual consumer. The services he renders are very similar to those provided by the middleman on the other side of the manufacturer. He purchases wholesale and sells retail, he provides capital to bridge the period between purchase and sale, and he runs risks.

In addition to these two middlemen, or groups of middlemen, a whole chain of people are interested in the financing of the industrial process, such as bankers, bill-brokers, acceptors, and dealers in foreign exchange. The services of these people are enlisted to facilitate the smooth passage of the raw material from the producer to the manufacturer

and the manufactured products from the manufacturer to the consumer.

From the standpoint of citizenship perhaps the most important function of the middleman, in the widest sense of the term, is to act as a sort of arbiter. He must forecast the course of business and interpret the desires of consumers before they know them themselves. He gives his orders to the manufacturers before the ultimate consumer has made up his mind what he wants, and his success in business depends on his perspicacity in foretelling what the consumer will want. On the basis of the orders of the middlemen, the manufacturer makes his decision to expand or contract his output.

In normal times there can be no doubt that the middleman benefits the community by thus constituting himself a sort of mercantile barometer. His forecasts tend, in normal times, to level out the booms and slumps of industrial production. We have emphasised "normal times," because it may happen that in abnormal times the forecasts of the middlemen actually aggravate the acuteness of industrial vicissitudes. The middleman, as in the boom year 1920, forecasting ever-increasing demands on the part of the consumer, gave exaggerated orders to the manufacturer, who on his part, basing his estimates on the orders of the middleman, launched out upon an enormous programme of production. *If* the middleman had rightly estimated the attitude of the consumer in the immediate future, he would have decreased rather than increased his orders. The manufacturer, taking his cue from the middleman, would have curtailed production. In this way the worst features of the boom and slump would have been averted. Such instances as these show that the technique of the middleman is far from perfect. The services that he renders to the community and to himself could undoubtedly be improved if, in addition to the rule of thumb methods which he at present employs, he had at disposal, to supply the scientific

groundwork of his estimates, reliable economic barometers such as those that are being compiled by the Universities of Harvard and Cambridge. As things are, when by ill-considered action he intensifies the ups and downs of industry, his activities are definitely anti-social and definitely contrary to the interests of the community and the individual citizen. For these recurrent booms and depressions not only bring losses to manufacturers but they produce widespread unemployment among the workers. None of the social evils of the industrial order is more serious in its effects on citizenship than unemployment, and in so far as it is preventable it is for the middleman to do his part to avert it by contributing through study and foresight to do away with the periodical "trade cycle."

A feature of the marketing system which is characteristic of the industrial order is the importance devoted to advertising. Mr. Dibblee quotes in his *Laws of Supply and Demand*,¹ an estimate by a President of the Incorporated Society of Advertisement Consultants that a hundred millions sterling are spent annually on advertising in Great Britain, and reckons a gross total of £550,000,000 per annum for Europe and North America. This estimate was made before the war, and it would appear likely that the annual sum thus spent cannot now be less than a thousand millions sterling.

§8. International Relations.—The development of marketing has itself contributed to the increasing internationalism of the modern industrial order.

In an era of highly-developed industrialism such as that in which we now live, each nation is dependent on the community of nations both to enable it to dispose of what it produces and to obtain in exchange commodities for consumption. The industrial order, in its natural process of development, essentially involves international relations.

These international relations of modern industry are to be found on two different levels. In the first place, great

¹ P. 182.

international trusts have been established for the production and marketing of such things as oil, meat, and tobacco. Such, for example, is the British-American Tobacco Company, founded in 1902 by the American and British tobacco combines to develop jointly the trade of the world. In other cases, while national companies retain full autonomy, they have formed international associations for the protection of their own home markets and for the development of foreign trade. Such an organisation is the International Rail-makers' Association, in which the British, French, German, American, and Belgian makers were each guaranteed their home market and shared in agreed proportions the export trade. By such international agreements, sometimes public, sometimes secret, the intensity of international competition is avoided.¹

In the second place, almost every one of the articles of common usage is international in its composition. In the coats that we wear the wool probably came from Australia, the buttons from Czechoslovakia, the thread from Scotland and the dyes from Germany. But that is not all. The textile machinery that wove the cloth may have been manufactured in England, but the ore that went to the making of the steel for the machinery probably came from Spain. The modern industrial order is the most international thing the world has ever seen.

Now what is the influence of this intense internationalism of modern industry on the individual citizens who form part of it? It has been brilliantly pictured by Graham Wallas:

"The widow who takes in washing," writes Graham Wallas, "fails or succeeds according to her skill in choosing starch or soda or a wringing machine, under the influence of

¹ International industrial agreements of this kind are rapidly increasing in number. (See Prof. D. H. MacGregor's Memorandum, *International Cartels*, for the International Economic Conference, 1927.)

half-a-dozen competing world-schemes of advertisement. . . . The tired old Scotch gatekeeper with a few pounds to invest, the Galician peasant when the emigration agent calls, the artisan in a French provincial town whose industry is threatened by a new invention, all know that unless they find their way among world-wide facts, which only reach them through misleading words, they will be crushed."¹

It is not only individual citizens who are affected by the internationalism of modern industry: the conditions of life and labour of whole masses of the community are influenced by it and even depend upon it. In certain countries the workers in particular industries are condemned to unsatisfactory conditions of labour because the employers cannot take any steps which would result in improving their conditions and raising the cost of production unless they have some agreement with manufacturers in all other countries with which they compete that they will adopt similar measures.

It is this intense internationalism of modern industry which has logically led to the conclusion that for the diseases of the modern industrial order, themselves international, international remedies must be sought. However anxious one State may be to improve the conditions under which its workpeople labour, it is impossible for it, owing to the fear of international competition, to adopt reforms without having an assurance that other industrial States will take similar action.

The classical example of the adoption of an international remedy for an international disease of modern industry is the prohibition of the use of white phosphorus in the manufacture of matches. Matches used to be made of white phosphorus, which is poisonous, and produces in the workers exposed to it a terrible disease. It was known that matches could equally well be made of red phosphorus,

¹ *The Great Society*, p. 4.

which is chemically identical, but is not poisonous. While it was universally recognised that it would be desirable to use red phosphorus and not white phosphorus, great hesitation was shown in taking this step, because red phosphorus is slightly more expensive than white. If any State with an international trade in matches had prohibited the use of white phosphorus, its own industry would have been driven out of the international market, and its workers would have been saved from the risk of disease and death from phosphorus poisoning at the expense of the risk of disease and death from unemployment and starvation.

It therefore became clear that the only remedy was an international remedy. Only if *all* States would agree to prohibit the use of white phosphorus would it be possible to get *any* State to do it. It was realised that the only real solution of such international difficulties was an international solution. The diseases involved in social progress, which was essentially international, would tend to destroy the whole fabric unless remedies could be applied on an international basis.

An international solution was, in fact, applied, before the war, in the case of the prohibition of the use of white phosphorus in the manufacture of matches. This solution was reached in 1906, but only after infinite negotiation and as a result of two special international conferences. It was obvious that if such special negotiations had to be undertaken in every individual case in which there was a general desire to secure international improvement, progress would be impossibly slow. The great need was for permanent machinery which would enable the countries of the world to come together regularly and automatically for the discussion of industrial improvements which all desired but few or none were able to introduce without the agreement of all.

This need was greatly emphasised by the war. The war made clear, even to those who had been blind before, the

economic interdependence of the nations of the world. It threw a new light on the international ramifications of industry and finance, and revealed to many for the first time the international relations of trade unions and the importance of the part played by labour in production. Men began to realise that in the last resort the bonds, economic, social, and humane, that unite nations are more potent than the disintegrating forces which drag them asunder; and that nations, however self-sufficient they may appear, can exist only by co-operating with other nations.

The result of our examination of the social aspects of the industrial order may be summed up by saying that the industrial order of society is more organic than any other. A strictly industrial society, such as England, is more organic than an agricultural society such as Spain, in the same way as the human body is more organic than a crowd of protozoa.

Each of the protozoa separately is capable of all the functions required for existence. It is completely independent of all other protozoa; it does not help the others to live nor does it die because they die. Very different is the case of the human body: each of its organs contributes to the life of the whole, and if any one of the vital organs is destroyed the whole body perishes. In this sacrifice of independence there is, as Mr. Bertrand Russell has pointed out, both loss and gain. "There is loss in the fact that the whole assemblage of cells can be killed by one vital wound, and that therefore a human body has a more precarious life than a crowd of protozoa. But there is gain in the fact that, by specialising, the several organs have become capable of doing work which no number of protozoa could do, and that the life of a human body is thus enriched and its responsiveness to its environment enormously enhanced."¹

Between an industrial and a non-industrial community

¹ *The Prospects of Industrial Civilisation*, p. 35.

exactly the same sort of differences exist. In a primitive pastoral or agricultural community each family is self-contained and self-sufficient. It produces all that it requires for its consumption. In an industrial community, on the other hand, no man is sufficient unto himself. He may be necessary to the life of the community, but many other men are necessary to his own life. Each man takes part in a process as a result of which a great stock of one particular commodity is produced ; he does not himself produce any of the commodity. The man engaged in a factory cannot produce the completed article without the assistance and co-operation of others. For his own existence he requires the products made by the co-operation of many other workers.

In every industrial community, as in every human body, there are vital organs, on the continued functioning of which the life of the whole organism depends. As the industrial system develops, its dependence on vital industries, or key industries, becomes more and more intimate. Cessation of work at an electric power station may result in an interruption of the functioning of all trains, trams, and factories in a whole district. The modern industrial system is highly sensitive, and disease in any of its organs rapidly affects the system as a whole.

From the highly sensitive organic character of industrial society it follows that the function of government acquires greater and greater importance. This is due to the fact that lawlessness is much more dangerous to the life of the community as a whole if that community is organised on a modern industrial basis than if it is a primitive agricultural society. In an agricultural community a lawless individual may injure individual members of the society by acts of prædial larceny, but he cannot endanger the very life of the community.

The modern State, thanks to the industrial applications of science, is much more sensitive and more concentrated than its ancient or mediæval prototype. The telegraph, the

telephone, the newspaper, and the wireless knit together the citizens of a far-flung empire for good or for ill, and the utilisation of modern mechanical means for disseminating productions in the realm of art, such as photogravure, colour-printing, the gramophone, the wireless, and the cinema induces unanimities of sentiment that may work either for the well-being or to the detriment of the State.

From the standpoint of the community, and in this case that is also the standpoint of the individual citizen, sound and stable government is more difficult, but is also more necessary to the life of society under the industrial order than under any other. The implications of this will engage our attention more fully in a later chapter.

CHAPTER III.

THE CITIZEN AS PRODUCER.

§ 1. **The Problem of Industrial Production.**—From the industrial standpoint the citizen may be regarded either as a producer or as a consumer. All citizens are consumers, and the vast mass of citizens are producers. In the great majority of cases the citizen is both a producer and a consumer. In this respect the distinction between producer and consumer differs from the distinction between employer and worker. The same citizen does not belong to the two categories "employer" and "worker"; but the same citizen does belong to the two categories "producer" and "consumer." In other words, the citizen as producer and the citizen as consumer is the same person viewed from different angles. In considering, then, the characteristics of the citizen as producer, we are examining the productive functions of the same citizen whose functions as consumer will later engage our attention. Our immediate task in this chapter is therefore to make a survey of the functions of the citizen as producer, and to consider to what extent the processes of industrial production contribute to citizenship or can be made to contribute to citizenship.

To produce is natural to man. There is an instinct to produce, to work, to be active. Activity is a characteristic which man shares with all the animals. It is the common biological feature of the animal kingdom. In man activity becomes purposefully productive, and it is this purposeful productivity which marks him off from the lower animals. Any community which does not purposefully produce

necessarily degenerates. Professor Patrick Geddes has pointed out that the conditions which induce parasitic degeneration are "freedom from danger, abundant alimentation, and complete repose."¹ Purposeful and intense productivity is one of the conditions of the well-being of the community.

Further, it is in purposeful productivity that man finds his happiness. No one has ever given a better definition of happiness than Aristotle when he defined it as "an activity of the soul in the direction of excellence in a full life." In this definition, by "excellence" Aristotle does not mean "virtue," he means excellence in work. For Aristotle the happy man is not the idle man, the man who does nothing; he is the man whose life is a full one, who is purposefully active.

But it is often asserted that the work which the average citizen is called upon to do as a producer in the industrial order is not in itself pleasurable. The average industrial or agricultural worker, according to this conception, does not find any joy in work, and does not believe that any joy can be found in work.²

If this view be sound, we therefore find ourselves on the horns of a dilemma. On the one hand, by definition, happiness, if it is to be found at all by the citizen, must be found in activity. On the other hand, the kind of activity in which the great mass of the citizens engage, i.e. in industrial or agricultural production, is not in itself pleasant.

Is there no way out of this dilemma? Is man condemned to spend his life in production, knowing that such an existence is inconsistent with the very possibility of happiness? Is

¹ Article, "Parasitism," in *Encyclopædia Britannica*.

² Prof. Graham Wallas in England (*The Great Society*), Prof. Taussig in America (*Principles of Economics*), and Dr. Levinstein in Germany (*Die Arbeiterfrage*), on the basis of enquiries among workers, all reach the conclusion that the industrial worker finds little or no pleasure in his work.

life a terrible deception, in which the attainment of happiness in the industrial order is a problem as insoluble as the quadrature of the circle ?

This problem of citizenship is not an insoluble one. Its solution depends, however, on a clear realisation of two considerations. In the first place, man is a composite being, with material needs as well as mental or spiritual ones. For the satisfaction of his material needs and those of the community as a whole, hard work is necessary, and this is often mere drudgery. It is mechanical work for the satisfaction of material needs.

But man's activity is not necessarily exhausted by this industrial production. His energies need not be completely used up by the necessity of supplying his material wants. There is an activity of the spirit, and there are needs of the spirit. In some cases, these intellectual or spiritual activities can be exercised in the work by which a man earns his daily bread. In other cases, however, such spiritual or intellectual activities can find full scope only in hours of leisure, in spare time.

Our problem, therefore, reduces to this : How can the conditions of industrial production be so organised as to permit the citizens of the world, whether employers or workers, to produce sufficient goods to satisfy the growing needs of the growing population of the world at a growing standard of comfort ? And how, further, can the system be organised so as to attain this end and still ensure that the men and women engaged in industry shall not be mere instruments of production, but find a field in industry itself for the exercise of citizenship ? And, finally, how can the system be organised so as to give to the citizen in industry, whether employer or worker, sufficient spare time after work is done, and sufficient reserves of energy after work is done, to enjoy to the full the fruits of citizenship ?

These problems concern employers and workers equally. The intensification of industrial production at low cost, in

order to ensure a higher standard of general comfort, involves the co-operation of employers and of workers. The need that those engaged in industry shall not be mere instruments of production applies to the employer no less than to the worker, for the employer who is obsessed by his business to the exclusion of all else is no less under the wheels of the industrial Juggernaut than the worker. Finally, leisure for the exercise and enjoyment of citizenship is no less necessary to the employer than to the worker. An "industrial magnate" whom overwork renders incapable of enjoying even the simplest pleasures of life is as much a victim of the industrial order as the most wretched "sweated worker."

In an ideal community, it has become a platitude to say, employers and workers would regard one another as partners. In the actual circumstances of modern industrial society, however, it is only too obvious that employer and worker, instead of regarding one another as partners, are often in bitter conflict. Such conflict renders impossible the civic co-operation that ought to be present in all industrial production. And what is the reason for this conflict? On the face of it the reason is evident to all. Both employers and workers want to obtain a larger share of the products of their joint efforts. Employers want to increase their profits; workers want to increase their wages. In some cases a way is found by a particular industry to increase both profits and wages by improved organisation of methods of production or at the expense of the consumer. In other cases the conflict proceeds on the assumption that an increase of wages will involve a fall in profits and *vice versa*.

Such internecine conflicts are not purely selfish. They are often conflicts of loyalties. The citizen, as employer, resists increased wage demands in loyalty to his employers' association or to his shareholders. The citizen, as worker, supports increased wage demands in loyalty to his trade union or his family. Both, in view of their allegiance to the bodies of which they are members, invest their attitudes

and their actions with all the glamour of loyalty to a cause. And this loyalty is real.

But is there no higher object of loyalty, in obedience to which the conflict between the partial loyalties owed by employers and workers respectively to their " mortal gods " may be resolved ? Such a higher object of loyalty exists. It is the community. Not the least of the tasks of citizenship is to conciliate the legitimate claims to loyalty of the various bodies within the community with the all-pervading necessity of loyalty to the community as a whole.

From the standpoint of industrial production, the standpoint of this chapter, the approach to the conciliation of loyalties must be found, if at all, in some system of methods which does not prejudice either the interests of the community as a whole or the interests of the two sections of the community chiefly concerned with production, namely, the employers and the workers. Is it possible to respect, at one and the same time, the interests of the community of all the citizens and the interests of the individual citizens as employers or workers ? Is it possible to benefit the worker without injuring the employer, or to improve the position of both without prejudice to the community as a whole ? It would not appear too presumptuous to say that this is possible. Humanity is not governed by static conceptions but by dynamic ones. Or rather we should say that in human relations the categories of physics do not apply, but those of biology. The cells of a rudimentary organism and the organs of a highly-developed being are alike in this that they are not in conflict ; what benefits one benefits all. Heart does not strive against liver nor both against lungs. And the same ought to be true of the body of industry. For industry is not mere machinery ; it is permeated through and through with the vitality of man, and without that it could not exist at all. Industry is organic, and just as the human body is well only when all its organs are working harmoniously, so does the health of

industry depend on the harmonious functioning of all its parts.

This analogy may be carried further. In the human organism good health is inconsistent with the continuing presence of waste matter. The human body, like every other organism, has an elaborate system for getting rid of waste. If this system does not work well, if waste matter, instead of being eliminated, clogs the organism, it sickens and dies. This is too well known to need emphasis. But in the industrial system the same thing is true. And this is rarely realised. If every organ of industry is clogged with waste, how can it be other than "depressed"? If industry does not produce at a fair price to the consumer, with a fair wage to the worker and a fair profit to the employer, it is because of waste.

This, then, is the first stage in the solution of our problem. If industry is to produce enough to satisfy the ever-increasing needs of the community as a whole, without injustice to the legitimate claims of those engaged in it, waste must be eliminated.

Let us turn, then, to consider, first the extent to which waste in industry actually exists, and secondly the aspects of waste which are particularly serious from the standpoint of the citizen as producer.

§ 2. Waste in Industry.—The extent to which avoidable waste exists in the productive system of modern industry is authoritatively indicated in the remarkable report of the Committee on Elimination of Waste in Industry of the Federated American Engineering Societies.¹ Mr. Herbert

¹ *Waste in Industry*, New York, 1921. This report has produced remarkable results in the United States in the elimination of waste and the increase of efficiency. The annual reports of Mr. Hoover, as Secretary of Commerce, show that the progress made in the elimination of industrial waste has enabled the nation to show "one of the most astonishing transformations in economic history." A great increase in the efficiency of operation of the railways has taken

Hoover, in his foreword to this report, refers to some of the aspects of this waste: "The waste from unemployment during depressions; from speculation and over-production in booms; from labor-turnover; from labor conflicts; from intermittent failure of transportation of supplies of fuel and power; from excessive seasonal operation; from lack of standardisation; from loss in our processes and materials—all combine to represent a huge deduction from the goods and services that we might all enjoy if we could do a better job of it." ¹

From the standpoint of citizenship and the community each of these forms of waste is in itself important. For the secret of securing an advance in the material conditions of citizenship lies, as has already been suggested, not in taking from the employer to give to the worker, or taking from the industrialist to give to the agriculturist, but in eliminating in all industrial, agricultural and commercial processes the mere waste which benefits none of the partners in the Great Society.

To examine all the sources of waste mentioned by Mr. Hoover would take us too far afield. But mention may usefully be made of some of the results of the investigation to which he refers. The general result of the enquiry is to show that industrial waste is caused not only by failure to use the time and energy of living men, but also by failure to use the productive equipment which has resulted from the time and energy expended by past generations. One of the chief aims of modern industry ought to be the effort to eliminate the waste of human energy. If this aim is to be attained, more must be accomplished in the same time,

place, progress has been made in the electrification of the country, and extremely useful work has been done by the Bureau of Standards in standardising processes and products in many industries, by reducing the variety in sizes and dimensions of everyday commodities.

¹ *Waste in Industry*, p. ix.

or the same accomplished in less time, and to this end the vast heritage of recorded knowledge of past experience must be made available to an ever-increasing number of men.

Waste in industry, in the view of those who made this enquiry, is due to four main causes. These four causes are :

" 1. Low production caused by faulty management of materials, plant, equipment, and men.

" 2. Interrupted production, caused by idle men, idle materials, idle plant, idle equipment.

" 3. Restricted production intentionally caused by owners, management, or labour.

" 4. Lost production caused by ill-health, physical defects, and industrial accidents." ¹

The amount of waste found by the enquiry to exist in industrial production is enormous. In the men's clothing manufacturing industry, for example, a total of 63·78 per cent. of all possible waste was found to exist, as an average, over all the plants studied. The importance of such figures is increased when it is remembered that " in the Committee's investigations industrial waste has been thought of as that part of the material, time, and human effort expended in production represented by the difference between the average attainments on the one hand and performance actually attained on the other." ² In other words, " waste " has not been conceived with reference to a theoretical standard of industrial wastelessness. The standard employed has been the standard of production actually attained by existing establishments. Waste in one establishment has been estimated not by reference to ideal conditions which ought to exist, but to the best conditions which actually do exist in an efficiently organised plant.

The following table shows, for each of six important industries investigated, the average percentage of waste

¹ *Waste in Industry*, p. 8.

² *Idem*, p. 3.

found to exist. It also shows the proportion of waste considered to be due respectively to management, to labour, and to "outside contacts."¹

Industry Studied.	Total percentage of Waste.	Proportion of Waste due to		
		Management.	Labour.	Outside Contacts.
Men's clothing . . .	63.78	48.33	10.50	4.95
Building . . .	53.00	34.30	11.30	7.40
Printing . . .	57.61	36.36	16.25	5.00
Boot and shoe . . .	40.93	30.25	4.85	5.83
Metal trades . . .	28.66	23.23	2.55	2.88
Textiles . . .	49.20	24.70	4.70	19.80

All of this enormous amount of waste could be avoided, not by the introduction of methods which exist simply as ideals, but by the employment of systems which are actually working in the best plants studied.

Some of the instances of waste to which the Committee refer are sufficiently interesting to quote.² In the printing trade, for instance, there are approximately 6000 brands of paper, 50 per cent. of which are more or less inactive. The duplication of brands serves no useful purpose and ties up money in unnecessary stock. The Technical Publishers' Association, on measuring 927 catalogues, found 147 different sizes. A trim of one-quarter inch on a 6 × 9-inch page is equal to 7 per cent. of the total cost of the paper. The majority of the industrial plants studied had no system of costings control. They therefore had no adequate method of judging fairly and accurately when improvements are needed and when waste is occurring. The seasonal character of many industries involves much waste through unemployment. "The clothing worker is idle about 31 per cent. of

¹ "Outside contacts" means "the public, trade relationships, and other factors."

² *Waste in Industry*, pp. 11-23.

the year ; the average shoemaker spends only 65 per cent. of his time at work ; the building trades workman is employed only about 63 per cent. of his time." Another fruitful source of waste is over-equipment. " Clothing factories are built 45 per cent. larger than is necessary ; printing establishments are from 50 per cent. to 150 per cent. over-equipped ; the shoe industry has a capacity of 1,750,000 pairs of shoes a day and produces little more than half that number ; throughout the metal trades standardisation of products would permit of large reductions in plant and equipment." ¹

We must now consider in detail the various respects in which waste in industry can be reduced, or even eliminated. In doing this, our main object will be to determine the extent to which the elimination of waste or, in other words, the increase of production, is consistent with, or contributes to, the realisation of the ends of citizenship.

§ 3. The Rationalisation of Industry.—It has become the fashion on the continent of Europe in recent months to talk about the Rationalisation of Industry, and in England also keen interest is being aroused. At the World Economic Conference in Geneva in 1927 " rationalisation " became almost a byword. A long resolution on the subject was adopted, and in the minds of some of the delegates it seemed to be regarded as a magic panacea for the economic ills of the world. Special attention was also devoted to the question of " rationalisation " at the 1927 Congress of the International Chamber of Commerce.

It is perhaps a point in favour of the movement for " rationalisation " in industry that it has been developed not by philosophers and economists, but for the most part by manufacturers actually engaged in the hurly-burly of business. It is not based on any clearly formulated theoretical principle, but has grown up as a result of practical experience.

¹ *Waste in Industry*, pp. 11-18.

What does the "rationalisation" of industry mean? In its broadest sense it simply means the application of every means furnished by technical knowledge and organisation to increase output. It denotes something more, however, than the organisation of a single industrial enterprise on the lines of maximum efficiency, whether from the point of view of equipment and lay-out, or from the point of view of the fullest possible utilisation of its human resources. In the sense in which it is most frequently used, "rationalisation" covers the organisation of a given industry as a whole. Its primary purpose is the elimination of waste and the reduction of costs of production to the absolute minimum. Its motive is the desire to minimise the casualties of the intensified warfare between rival industries in different countries which has resulted from the economic upheaval of the war and post-war period. Its form is that of the trust, combine, or cartel. Its activity may take the form of price-fixing, control of supplies of raw material, regulation of output, marketing arrangements, or merely the obviating of intermediate profit-making in the stages between the getting of the raw material and the selling of the finished product, by the organisation of a principal industry and all its ancillary industries "from top to bottom."

It thus involves the examination of the organisation of industries as a whole in all their aspects. But no advantage would result from an attempt to rationalise economic methods from above without applying proved principles of scientific management patiently and humbly in the workshop. And it is one of the merits of the "rationalisation" movement that while it attempts to take wide and synthetic views of industrial development as a whole, it fully realises the tremendous importance of detail in the actual running of the individual factory.

Where did "rationalisation" start? Without doubt, in the United States. Even before the war efforts in the direction of "rationalisation" had been made in two widely

differing domains. In the first place, the great Trust movement aimed at "rationalising" industry by centralising production and eliminating the competition of small establishments. In the second place, the Scientific Management movement, originated and fathered by Taylor and Gilbreth, aimed at securing from the human element in industry the greatest possible output with the least possible effort. It was not, however, until after the war that the great campaign for "rationalisation" started in America. The campaign is closely associated with the name of Mr. Hoover, for its principal impetus came from his "anti-waste" policy which had as its scientific basis the results of the enquiry of the Committee on Elimination of Waste in Industry of the Federated American Engineering Societies. The industrial results of the application of this policy in the United States are too well known to need emphasising.

Little wonder that the amazing progress in the prosperity of the United States has attracted the attention of European countries, particularly those which have passed through peculiarly trying economic experiences since the war, to the possibility of applying in their own industrial systems the principles to which such sovereign results are attributed on the other side of the Atlantic.

In this European movement for "rationalisation" in industry, the leading place is taken by Germany. The "Reichskuratorium für Wirtschaftlichkeit," an office largely subsidised by the Government, but entirely independent in its work, centralises and directs the activities of a number of institutions for scientific organisation, the research laboratories attached to the technical and commercial colleges and the universities, occupational organisations, and associations of consulting engineers and technicians. Through the medium of research committees it also studies independently all questions relating to scientific organisation. By means of intensive propaganda, lectures, special courses, pamphlets, and the daily Press, public opinion is familiarised with the

new spirit, methods, and practical measures, and there are very few large undertakings which do not take them into account. Very few politicians, whatever their party, have not included the rationalisation of production in their programme.

In France also the greatest interest is being taken in methods of "rationalisation," and the practical applications of it in individual factories have developed even more rapidly than research and propaganda.

In the "new countries" of Central and Eastern Europe, where new industries are being developed, much study is also being given to the practical realisation of methods of "rationalisation."

The "rationalisation" of industry includes four main conceptions: (1) The technical organisation of the individual factory, planning of buildings, co-ordination of processes, routing of materials, etc.; (2) scientific management, i.e. the organisation of the personnel of the factory; (3) standardisation of product and mass production; (4) the organisation of the industry as a whole, through combines, pools, cartels, and trusts.

The movement for the "rationalisation" of industry is not devoid of certain dangers. Apprehension has, indeed, been widely expressed as to some of its possible consequences. There are, in fact, two categories of persons who may suffer as a result of the hyper-organisation of the production and distribution of goods that is "rationalisation." These categories are (1) the workers employed by the undertakings rationalised; and (2) the consumers of the goods produced. At the Economic Conference fears were expressed on behalf of both these categories of persons and satisfaction was felt at the statement of M. Olivetti, the well-known Italian industrialist, and one of the representatives of the International Chamber of Commerce, who pointed out that in the practice of "rationalisation" it was necessary on the one hand to avoid taking measures that would injure the

workpeople and on the other to give consideration to the interests of the consumers.

It is true that those who direct the fortunes of great cartellised industries may be inspired by either of two very different ideals. On the one hand they may desire, by maintaining or increasing the price of their products, to devote all the benefits of "rationalisation" to increasing profits. On the other hand they may aim, while paying a fair return on capital invested and giving fair wages to labour employed, at passing on the benefits of "rationalisation" in a spirit of public service, to the consumer in the form of reduced prices. Which of these two ideals will prevail will ultimately depend on public opinion.

§ 4. Industrial Fatigue.—Production may clearly be increased by improving any of the means that contribute to it. Before the economic utilisation of power-driven machinery an increase in production depended mainly on improving the craftsmanship of the worker. When the industrial revolution introduced the era of machine-production, an increase in production was sought by improving the machinery used and the processes of manufacture. Mechanical means become more important than human means. In recent years, however, the pendulum has again been swinging in the direction of the worker. While every effort continues to be made to improve machinery and organisation, attention is being devoted to the study of the laws which govern the functioning of the human factor in industry. From the standpoint of production, the aim is, by diminishing the fatigue experienced by the worker, to enable him to produce a larger output. From the standpoint of the individual worker, the aim is to enable him to produce this larger output in a shorter working day than was formerly considered possible, and still be sufficiently little fatigued to utilise with advantage the leisure which he thus obtains.

While the initiative in the study of industrial fatigue

was taken in America and Germany, striking work has in recent years been done in England by the Industrial Fatigue Research Board and the National Institute of Industrial Psychology. These institutions have brought to the investigation of problems of fatigue, pending the creation of a separate discipline, the methods and experience of such sciences as physiology, psychology, and statistics. From our standpoint, the psychological experiments are perhaps the most interesting. Their general scope has been well explained by Dr. Myers: "The psychologist, on the other hand, has conducted exclusively 'human' experiments, treating the organism as a whole in place of using 'muscle nerve' preparations. He has approached the problem from the standpoint of mental, as well as from that of muscular, fatigue. He has devised 'tests' of mental fatigue, constructing 'work curves' of mental output, and analysing the psychological factors which determine the forms of those curves, such as spurt and practice. He has studied the effects of drugs, e.g. of tea, coffee, strychnine, and alcohol, on mental and muscular fatigue. He has examined the effects of rest pauses of different length, introduced after varying periods of work, on mental efficiency. He has shown the unreliability of certain interpolated tests as evidence of muscular or mental fatigue; he has shown the importance of a rigorous, precise training in the methods of experimental psychology in order to avoid the pitfalls incidental to human experiment; and he has so prepared the way for a systematic investigation of the problems of industrial fatigue that future success must depend on intimate psychological and physiological co-operation."¹

From the point of view of citizenship, the study of industrial fatigue is of special importance because it benefits all concerned. No conflict between employer and worker is involved. Improved methods of work leading to a diminution of fatigue are of advantage both to the employer, who

¹ Dr. C. S. Myers, *Mind and Work*, pp. 39-41.

obtains from his worker a greater output in a given time, and to the worker, who produces more with less expenditure of effort. The reduction of fatigue in industry is both an economic proposition and a social duty.

What is fatigue? It has been defined by Dr. W. H. R. Rivers, a pioneer in the field, as "a condition of lowered capacity for work which follows or occurs during the performance of work of which it is a direct result."

Now, whatever view we may take of the relation between mind and body, it can be agreed that fatigue may manifest itself either as physical or mental. As physical it is the result of a definite physiological condition of the muscles of the body. Without venturing on the troubled seas of physiological discussion, we may say without fear of contradiction that muscular effort cannot be continued indefinitely partly because waste products of physical activity gradually clog the muscles, and partly because continued effort causes a strain on stored muscular energy. The body is so constituted that after a certain period of activity further effort becomes increasingly difficult and costly, and eventually a period of rest is necessary to permit the muscles to recuperate. The fatigue that is experienced during this period is a sign that muscular activity is becoming more difficult and costly, and a suggestion that a period of rest for recuperation is desirable.

The incidence of fatigue in various kinds of work is now well established statistically, and is illustrated by a curve which innumerable investigations have shown to be practically uniform. The explanation of this work-curve is very simple. At the beginning of the day's work comes a period of re-initiation, during which the human engine is being warmed up. This period rapidly changes into one in which the effects of habit and practice, together with freshness, show themselves in intense muscular activity rising rapidly to a peak. From this peak, as fatigue gradually begins to be experienced, activity and output gradually decrease,

until the end of the spell of work. After a period of rest the curve repeats itself, and so on indefinitely. As might be expected, the work-curve varies considerably according to the kind of work done. "When the work involves merely strenuous muscular exertion, we may expect a rapid and early rise in the work-curve to a maximum, followed by a fairly definite fall during the morning spell, and after dinner a fair recovery followed by a progressive, well-marked fall throughout the afternoon. When, on the other hand, the work is characterised by skill and dexterity, we find a slower, more gradual rise to the maximum, followed by a less obvious fall, a less complete recovery after dinner, and a much smaller drop at the close of the afternoon. When, as in machine work, the output is largely independent of the human factor, the curve of output may be expected to reach a maximum at about the third hour of the morning spell, then to fall slightly, and during the afternoon to maintain so high a level that the output may exceed, or at least equal, the morning's output."¹

In all kinds of work, and at all stages of industrial development, it has been customary to have rest pauses at intervals in order to permit the recuperation of the muscles. In a primitive and pre-industrial community, the craftsman or agriculturist, who was his own master, warned by the onset of fatigue, took rest pauses when he felt them to be necessary. The slave or serf, however, was usually driven to work without much regard to such questions as rest and fatigue. With the coming of the industrial order, and the increasing subordination of natural human rhythm to the artificial rhythm of the machine, the question of regularising rest pauses assumed greater importance, and it became a general practice to allow two rest pauses in the course of the working day, a shorter one at breakfast time and a longer one for the mid-day meal. A great impetus was, however, given to the scientific study of rest pauses in the diminution of

¹ Dr. C. S. Myers, *Mind and Work*, pp. 62-63.

fatigue and the increase of output by the Scientific Management movement and by the development of industrial psychology.

The classic example is the experiment of Dr. F. W. Taylor, the father of Scientific Management, in connection with the loading of pig iron into railway trucks. He used, for the purposes of the experiment, a gang of about 75 men, employed on this work, at the Bethlehem Steel Works, U.S.A. Each man had to lift a pig weighing about 92 lb., walk up an inclined plank to a truck with it, and let it fall into place. Taylor worked out mathematically the percentage of time in working hours during which a man ought to be "under load." In the case of the pig-iron loader, Taylor calculated that the percentage should be 42-43. During the remainder of the working-day he should rest. Taylor applied this system, arranging for the loaders alternating periods of work and rest, seven minutes' work followed by ten minutes' rest. They were also instructed in the best method of lifting the pigs and the best method of walking, both with a view to the avoidance of unnecessary fatigue. The final result was that each worker was able to carry $47\frac{1}{2}$ tons per day instead of $12\frac{1}{2}$ tons under the old unscientific system, and with no increase in fatigue. (Such experiments obviously have important repercussions on wages and unemployment. For the moment, however, we are concerned with them only as they relate to efficiency in production.)

Equally striking results have been attained in industries involving less heavy physical work.

In the case of each trade and each job, it is necessary to experiment carefully to find the best arrangement of work period and rest pause, to ensure the best results from the standpoint both of output and of fatigue. If the rest pauses are badly arranged, they may do little to decrease fatigue, and may cause output to diminish also. And it should not be forgotten that there are differences between individuals :

some work better in short stiff "bursts," others in long periods "Ohne Hast, Ohne Rast."

In addition to the physical fatigue which we have so far been considering, there is a kind of mental fatigue whose results are not less important. The incidence of this fatigue is described by Dr. Myers: "When we are engaged on any one piece of mental work, other mental processes are at first inhibited which are incompatible with it; but the onset of local cerebral fatigue is safeguarded by the gradual failure of these processes of inhibition. The inhibited mental processes sooner or later refuse to be suppressed. Other mental activities accordingly intrude, and by *their* inhibitory and disconcerting action make the continuance of the monotonous mental work impossible."¹

The constant endeavour that is generally made to overcome this inhibitory intrusion is usually accompanied by feelings of "boredom," and later by feelings of "weariness," as the effort to concentrate becomes more difficult. In practice, the need for concentration becomes lessened by habit. Much work in modern industry is so automatic that it is performed without conscious concentration, and therefore though technically monotonous it does not produce the ill-effects associated with boring or wearying work. Further, "boredom" is largely subjective. It is a fact of constant experience that work which one man will find boring in the extreme will be quite pleasant to another.

Boredom and weariness are therefore generally signs that the particular bit of work that induces them is not suited to the worker. They thus operate, perhaps as effectively as many psychological tests, as a kind of vocational guidance, in the negative sense at least that they warn the worker against continuance on that particular kind of work. In the case of mental work, it is particularly important that, through a mistaken sense of the virtue of perseverance, a man should not continue to strive to overcome the "boredom"

¹ *Mind and Work*, pp. 47-48.

which a certain form of work induces, but should choose some other kind of work which suits him and to which he is suited. For the efforts made to overcome boredom are much more harmful, resulting often in a "nervous breakdown," in the case of mental work, than the similar volitional endeavours to overcome muscular incapacity.

It is not to be expected that all fatigue can be eliminated by means of even the most scientifically arranged rest pauses. All that is done by the interpolation of rest pauses is to delay the onset of fatigue until the end of the working day, and to avert the deleterious consequences of excessive fatigue, caused by too long an uninterrupted stretch of work. The problem of the diminution of fatigue, in the interests both of the worker and the employer, requires for its solution not only a study of the distribution of work and rest pauses, but also of the total length of the working day and its relation to the period of rest before the work of the next day begins. Logically, it drives us also to consider the question of securing to all workers regular periods of holidays with pay. These questions will be considered at a later stage of our enquiry.

Fatigue is due not only to the kind of work, and the length of time during which work is carried on, but also to the conditions under which work is done. And experience has shown that the provision of good conditions is important from the standpoint not only of the worker's health and welfare, but also of the employer's interests.

Two striking examples of the influence on the fatigue of the operative of atmosphere and of illumination are given by Mr. D. R. Wilson, the Secretary of the Industrial Fatigue Research Board.

The first of these relates to the effect of a hot and humid atmosphere on the operative. In the weaving of certain textiles, moisture is purposely injected into the air in order to bring about conditions suitable for the manipulation of the yarn. It is generally accepted that production is

physically stimulated by a high temperature and a high degree of humidity, so that, apart from the human factor, efficiency should increase *pari passu* with temperature and humidity. Observation on the part of two of the Board's investigators, working independently, has shown that this expected increase only takes place below a certain limit of temperature, and that as the wet-bulb temperature rises above 73° F., there is actually a diminution of efficiency. Here, then, there are definite indications that at a certain stage the beneficial physical effects on the yarn are more than counterbalanced by the fatigue resulting from the unfavourable physiological conditions.

The second illustration deals with the effect of lighting. Evidence has been adduced to show that in silk weaving, which is an exceptionally fine process, productive efficiency falls about 10 per cent. with even a good system of artificial light, as compared with natural lighting. This inference has received direct support from a later investigation into the weaving of cambric, which is comparable in respect of fineness with silk weaving. Here precisely the same effect exists, namely, a reduction of efficiency in artificial as compared with daylight, and even in its numerical value (11 per cent.) it coincides almost exactly with that previously observed. Lastly, a third investigation has shown that in the coarser process of cotton weaving the effect is sometimes (though not always) present, but as would be expected, it is less pronounced, amounting in one instance to 5 per cent. An even more striking example of the relation of lighting to output occurs in an investigation carried out by the National Institute of Industrial Psychology in a coal mine, which shows that better illumination may bring about an improvement of nearly 15 per cent. in output.¹

Another factor whose influence on fatigue cannot be

¹ *Industrial Hygiene and Safety and the International Labour Organisation*, International Labour Office, Geneva, December, 1923 (pp. 37-38).

overlooked is the position assumed by the worker during working time. Prolonged standing or the maintenance of a cramped position, as is often the case in mining, undoubtedly increases fatigue. Experience proves that in many industrial processes standing and stooping is often unnecessary, and fatigue can be sensibly lessened by providing seats for the workers and by arranging them at a proper height so as to avoid stooping. To make such humane arrangements as these is important not only as an element of respect for the personality of the citizen, but as a means of diminishing fatigue and thus increasing production.

Noise is another factor which operates detrimentally in inducing fatigue. Heretofore, too little attention has been paid to the effect of noise on fatigue. It has been assumed that the worker in an engineering shop or shipyard becomes accustomed to the vibration of the machinery or the hammering of rivets, so that those noises which to the casual visitor are deafening are not noticed by him. There is no doubt that the human organism possesses great powers of adaptation to noise, but it is certain that this process of adaptation involves a considerable nervous strain. Fatigue does result from the conscious or sub-conscious effort not to permit irrelevant noises to distract from the work in hand. The instinctive tendency to shrink from any loud noise is, under modern industrial conditions, necessarily overcome, but it is at a considerable cost of nervous energy. Much fatigue could be avoided by perfectly practicable reforms not only in the factory, but also in the home and the street.

Finally, attention must be drawn to the great importance, in connection with fatigue, of the prevention of industrial accidents. It is important to realise that the ill-effects of conditions leading to industrial accidents are not confined to the actual accidents which result. Conditions in industries in which accidents are frequent have a depressing effect on the nervous energy of the workers. In dangerous trades there is usually a tendency to neurasthenia.

§ 5. **Industrial Accidents.**—What can be done to prevent or at least reduce industrial accidents? The problem is clearly an important one. If the tremendous waste involved in industrial accidents can be stopped, great improvements will take place not only in industrial production but in the happiness and prosperity of the individual citizen. And the great majority of these casualties of peace can be avoided.

Industrial accidents are generally considered from the humanitarian or sentimental standpoint, and attention is concentrated on the toll of human life and limb which they exact. Not less important is the economic waste, much of it preventable, due to industrial accidents. The prevention of accidents is thus desirable in the interests of citizenship, both in order to avoid pain and suffering on the part of the worker and his family and to avoid adding to the cost of production of the articles which he produces. To appreciate the importance from both these standpoints of the prevention of industrial accidents, reference must be made to the statistics published in Britain and elsewhere. The table on next page shows the number of accidents per thousand full-time workers in certain countries in which systems of workmen's compensation are in existence.¹

It is worth while to examine in some detail the significance of these figures so far as they relate to Great Britain. According to the returns of the Home Office (Workmen's Compensation Acts) for 1921 more than £5,500,000 were paid in compensation in respect of over 2000 fatal and nearly 300,000 non-fatal accidents. These figures are in themselves sufficiently striking, but they by no means represent the total of all the industrial accidents which occurred in this year in the United Kingdom, nor does the compensation paid represent anything like the total cost of these accidents. So far as cost is concerned, the figures quoted represent

¹ *Methods of Statistics of Industrial Accidents*, International Labour Office, Geneva, p. 52.

Country.	Year.	Accidents per 1000 Full-time Workers.	
		Total.	Fatal.
Austria—			
Former	1911	16.86	0.55
Present	1920	52.90	0.51
Belgium	1910	117.97	0.61
Denmark	1919-20	13.05	0.44
Finland	1919	46.3	0.8
France—			
Insurance	1910	4.51	0.45
Factories and mines	1913	129.50	0.54
Germany—			
Industries	1920	6.31	0.73
Agriculture	1920	2.52	0.14
Italy	1921	162.16	0.52
Netherlands	1917	100.7	0.34
Norway	1918	58.3	0.71
Sweden	1919	40.16	0.45
Switzerland	1918	156.51	0.4
United Kingdom	1921	38.73	0.33
United States—			
Iron and steel	1919	111.97	1.11
Oregon	1919-20	188.14	1.87

only the actual compensation paid under the Act. To that total must be added legal, medical, and other charges. According to the 1922 Report of the Departmental Committee on Workmen's Compensation, employers pay £100 in premiums for every £48 paid out in benefits to injured workers. Again, compensation payments in accordance with the scale laid down in the Act are frequently supplemented from accidents funds administered by Employers' or Workers' organisations. These are all direct charges on the community. Finally, there are certain indirect charges, which cannot be accurately costed, arising from loss of time both of machine and of man, and especially from labour turnover, that is to say, the constant changing of staff, a factor which is perhaps not so fully valued as it deserves. Indeed, Lt.-Col. J. A. A. Pickard, D.S.O., General Secretary of the British Industrial "Safety First" Association, con-

siders that "it is not unlikely that the total cost of accidents works out at not less than double the amount of compensation paid."¹ Further, the returns showing the total number of accidents include, in accordance with the Workmen's Compensation Act, only cases where the period of disablement exceeded seven days. A large number of minor accidents are therefore excluded from the figures quoted.

These facts are therefore only a very insufficient indication of the human and industrial waste, showing itself not only in human pain and anxiety in the worker's home, but also in the financial loss of the whole community owing to loss of time and payment of benefit. From every aspect of the life of the citizen it is therefore highly desirable that every possible step should be taken to prevent the occurrence of industrial accidents.

In connection with accident prevention, the most important feature is the causation of accidents. Logically, every accident is the outcome of a long train of events, and can be traced to some remote cause, or series of causes. If the proximate cause of an accident is, for example, the falling of a tower, it is necessary to look beyond the mere crash of the tower for the causation of the accident. Why did it fall? Perhaps because the strength of the materials was miscalculated by the builder, or the specifications were not carried out properly by the contractor, or the work was negligently done by the worker. If the worker was to blame, it may again be asked why he was at fault. It may have been because he was fatigued, or insufficiently trained. So we may be brought to consider the conditions of work which permitted him to be engaged on responsible work when insufficiently trained, or over-fatigued. It is clear from this theoretical example that it may often be extremely difficult to fix responsibility for industrial accidents.

¹ *Industrial Hygiene and Safety and the International Labour Organisation*, International Labour Office, Geneva, Studies and Reports, Series F, No. 9, p. 8.

Official statistics have been established in Germany and other countries in which responsibility for the occurrence of accidents is definitely assigned. The following extract from the German statistics will indicate the classification adopted :

RESPONSIBILITY FOR INDUSTRIAL ACCIDENTS IN GERMANY
IN PER CENTS.¹

	1897.	1907.
Fault of the employer	16.81	12.06
Fault of employee	29.89	41.26
Common fault of employer and employee	4.66	0.90
Fault of fellow-workers and other persons	5.28	5.94
General hazard not involving fault .	42.05	37.65
Contingencies, etc.	1.31	2.19
Total	100.00	100.00

In about 60 per cent. of these cases, it will be seen, the fault has been assigned to some particular class of person. Accidents imputed to the workers, it will be noticed, have increased from about 30 per cent. to about 40 per cent. in ten years. In most cases, it is stated that the worker's fault consists in lack of skill, inattention, or carelessness.

In respect of causation, accidents are, however, also classified not in accordance with responsibility, but in accordance with the immediate physical cause. Statistics generally indicate separately those accidents which are due to machinery and other accidents. In most countries, accidents caused by machinery account for about one-fourth of the total.

In most industrial States, the prevention of accidents is at present undertaken in two ways : Firstly, by legislation consisting of Factory Acts, together with the necessary machinery of factory inspection to enforce their provisions ;

¹ Cf. *Methods of Statistics of Industrial Accidents*, International Labour Office, Geneva, Studies and Reports, Series N (Statistics), No. 3, p. 11.

and in the second place, by unofficial "Safety First" organisations which attempt to draw to the attention of the worker the dangers which he runs, and the best way of avoiding accidents.

Industrial safety is the chief concern of the factory inspection systems established by legislation in the three oldest industrial countries—Great Britain, Germany, and France—and in most of the others.

The Acts enforced by factory inspectors in Great Britain are the Factory and Workshop Acts, 1901-1911 (as amended by the Notice of Accidents Act, 1906, the Police Factories (Miscellaneous Provisions) Act, 1916, the Employment of Women, Young Persons and Children Act, 1920, the Women and Young Persons (Employment in Lead Processes) Act, 1920, and the Truck Acts in so far as they apply to workers in factories and workshops. Where some development or modification of the law is found desirable, the Home Secretary is responsible for taking action, and it is to the powers given him by the Acts that recourse is had whenever it becomes necessary to impose special safeguards and precautions for the protection of life and health. He prescribes, in the form of regulations, the exact measures found necessary to protect the workers in particular trades or processes. This procedure can be applied to any manufacture, machinery, or process which the Home Secretary certifies to be dangerous. Regulations of a less technical nature, known as Welfare Orders, may also be issued under the Police Factories (Miscellaneous Provisions) Act of 1916. There are now more than thirty codes of regulations for particularly dangerous and unhealthy trades in operation. These codes are very carefully drawn up, and before they are made statutory, persons affected, both employers and workers, must be given an opportunity of raising objections to the draft provisions and an enquiry held if necessary. The regulations must, moreover, be laid before both Houses of Parliament, and may be annulled in whole or in part by

resolution of either House within forty days. The final result is absolute uniformity in the enforcement of technical details, which have been thoroughly considered in the light of the practical experience of inspectors and the technical knowledge of experts, and on which employers and workers have been consulted.

The problem of accident prevention is, however, not merely one for legislation. It has been estimated that three-quarters of the industrial accidents which occur are in no way due to failure on the part of the employer to provide mechanical safeguards. In the opinion of many people, while much still remains to be done in the way of provision of more perfect and more efficient safeguards, the bigger task is to ensure that the workers themselves make full and proper use of such safeguards as are provided, and that they exercise reasonable personal care. The problem is largely a psychological one.

These are the considerations which have led to the development, notably in Great Britain and the United States, of the "Safety First" movement. This movement works in close sympathy and collaboration with the Government authorities, because the ultimate object which they both have in view is the same. His Majesty's Chief Inspector of Factories has, indeed, said: "The 'Safety First' movement deals with problems which the Factory Act cannot touch. Far from being unnecessary, it should be regarded as a very important adjunct to that Act." The aim and object of the "Safety First" movement is to quicken the natural instinct of self-preservation which has not yet adjusted itself to the rapid march of civilisation, and to keep a man always subconsciously on the lookout for mishaps. The main causes of the 75 per cent. of industrial accidents not due to failure to provide mechanical safeguards are ignorance, carelessness, want of thought, and particularly a lack of appreciation of danger and an inclination to take short cuts or risks. It is, of course, inevitable in most kinds

of industry that risks should occasionally be taken. In taking a risk, however, judgment, foresight, and a due sense of proportion and care are very necessary factors. And one object of the "Safety First" movement is to educate the workers in the judgment necessary in these cases.

The British Industrial "Safety First" Association lays emphasis on the securing of full co-operation for accident prevention between management, foremen, and workers. The experience of those firms in which the best results have been achieved is definitely that some form of Safety Committee or Committees is essential. The interest of the worker must not only be attracted, but must be held with this in view. The "Safety First" Association has issued a series of striking posters aimed at inducing the safety habit, or emphasising certain frequently-recurring forms of accident. Emphasis is also laid on the importance of efforts to encourage the workers in making suggestions of their own for furthering accident prevention work.

As an indication of the efficacy of organised "Safety First" work in preventing accidents, the results at the Port Sunlight Works may be mentioned. In these works, the number of accidents reported to the Home Office in 1916 amounted to 36·7 per thousand employees. A "Safety First" organisation was then established, and a steady drop was recorded each subsequent year, so that in 1920 the corresponding figure was only 7·8 per thousand employees—practically an 80 per cent. reduction. An important commentary on these figures has been given by Lord Leverhulme: "The humanitarian aspect of the 'Safety First' movement it is hardly necessary to stress. The saving of thousands of homes from suffering and sorrow is so obvious a blessing that it does not require argument. But as it seems probable that many firms have hesitated to enter upon a 'Safety First' campaign from an impression that it would involve them in increased works costs, it is important to point out that the very opposite is the

invariable result, namely, economies and decreased works costs. Our experience at Port Sunlight fully demonstrates that expenditure upon an efficient 'Safety First' organisation is repaid many times over in resulting economies, apart altogether from one's duty to the employee, which is rightly the first consideration."

The economic results of the "Safety First" movement have been recognised in Great Britain by the insurance companies. In the working arrangement agreed upon between the Home Office Workmen's Compensation Committee and the Accident Offices Association (comprising some fifty of the leading insurance corporations) it was stated: "For the purpose of encouraging accident prevention, the Accident Offices Association will co-operate in bringing gradually into being a system of discounts from normal rates in consideration of approved safety devices or provisions."¹

Not less striking are the results of the "Safety First" movement in the United States. According to Mr. W. H. Cameron, the Managing Director of the National Safety Council of the United States, "accident prevention is becoming rooted in the progressive industries of our country, and is destined to become a transforming influence upon the whole industrial life of America."

The National Safety Council of the United States is a voluntary co-operative society of many thousand members, consisting of industries, railroads, insurance companies, public institutions, and individuals. It has established a national clearing house of information on all questions relating to accidents and safety, and it employs experts as advisers in organising cities to wage war aggressively against accidents in the local community. During ten years, it issued more than 3000 varieties of "Safety" posters. The

¹ Cf. International Labour Office, Geneva, Studies and Reports, Series F (Industrial Hygiene), No. 9, *Industrial Hygiene and Safety and the International Labour Organisation*, p. 17.

safety work of the Council has been carried out in close co-operation with all other associations aiming at the avoidance of accidents. In spite of the Federal and State Governmental activities in developing safety codes and rules, it became apparent a few years ago that a national independent and non-partisan committee was necessary to unite the interests of the manufacturer, the worker, the technician, and the consumer in the creation of standard practices of manufacture, including safeguards. The organisation of the American Engineering Standards Committee was the outgrowth of such a demand, and one of the branches of this Committee's activity has been the bringing together of the various interests to create safety codes satisfactory to every interest. Some fifty-seven committees have been appointed, and already many codes have been completed.

The basis of all safety work in the United States is, as in England, the recognition that the problem is in a large proportion a psychological one. In its simplest terms this is evidenced in the belief of each worker that an accident is "something that is likely to happen to the other fellow but not to himself." The safety work of the Council has therefore been directed largely to educating the worker to maintain an attitude of personal carefulness.

Industrial accidents affect in all countries not only the productivity of industry, but the welfare of the worker. Everything done to stop the tremendous waste due to accidents will improve the conditions of production, and also the conditions of life of the citizen, in the community.

§ 6. Sickness.—A source of industrial waste on the same plane as the industrial accident, and even more important, is sickness. Sir George Newman estimates in his Annual Report for 1923¹ that loss of time in Great Britain from sickness, most of which is preventable, "costs the country not less than ten times more than that which it

¹ "On the State of Public Health," *Annual Report of the Chief Medical Officer of Health for 1923* (H.M. Stationery Office).

loses owing to strikes and labour disputes." Under the Health Insurance Acts, "the total number of weeks represented by the sickness and disablement payments in 1923 may be estimated at about $6\frac{3}{4}$ million weeks' sickness and 6 million weeks' disablement for men, and at $4\frac{1}{4}$ million weeks' sickness and $3\frac{1}{2}$ million weeks' disablement for women. These figures, which do not include the first three days of incapacity for which sickness benefit is not payable, give a total of $20\frac{1}{2}$ million weeks' work lost in 1923 through sickness, or a period of 394,230 years. That is to say, in England and Wales there was lost to the nation in the year, among the insured population only, and excluding the loss due to sickness for which sickness or disablement benefit is not payable, the equivalent of the work of 394,230 persons. Moreover, it must be remembered that it is not only the working equivalent of 394,230 persons that was lost, but also the labour and expense involved in their care during their incapacitation."¹ These figures are suggestive of the immensity of the potential contribution of medical science towards increased national output. This conclusion is supported by similar estimates made for the United States. A report on national vitality prepared in 1909 for the American National Conservation Commission, appointed by President Roosevelt, estimated that there were then about 3,000,000 persons seriously ill at all times in the United States. It was estimated that 42 per cent. of this illness was preventable, and that such prevention would extend the average life by over fifteen years.²

The aim of those who are concerned with the health of the citizen in its social aspects, "public health," is not merely a negative one, not merely the prevention of disease; but is positive, the increase of the vitality, capacity, and efficiency of the human body. This increase in vitality

¹ "On the State of Public Health," *Annual Report of the Chief Medical Officer of Health for the Year 1923*, p. 18.

² *Waste in Industry*, p. 20.

is of importance not only from the narrowly industrial standpoint, not only to enable the worker to produce a larger output, but from the standpoint of his enjoyment of all the gifts which life has to give. "Our aim," writes Sir George Newman, "is not only to oppose disease but to advance and develop physical fitness and well-being."¹ The purpose of all public health machinery is, through the averting of social waste due to sickness and disease, the intensely positive one of increasing, in individuals or in the community, the sum of well-being. For much of the discontent that is felt with the monotony of work is due to the general lowered vitality of the worker. The worker who is full of energy and vitality generally possesses the capacity to find contentment in his work, or if it is definitely repugnant to him, the ability to find some work in which he can take pleasure. The worker who is chronically discontented with his work is, in the majority of cases, the worker who does not possess sufficient vitality either to take an interest in it or to find something else that is congenial.

From the point of view of the citizen in industry, the problem of public health presents two important aspects. The first aspect, which is the more spectacular but by no means the more important, is that of the so-called "dangerous trades." There are certain occupations, followed in all modern industrial States, which present peculiar dangers to health and life itself. In such occupations, special precautions require to be taken, and in most advanced States are taken, to guard the workers against specific occupational diseases. There is, however, a second and more general aspect of the problem. Enormous social waste results from "broken time," absence from work, and inefficient work due to ill-health. It is very difficult, if not impossible, to give any statistical estimate of the extent of this waste, but it is certainly enormous. "(It) is so widely prevalent as to

¹ Introduction to Collis and Greenwood, *The Health of the Industrial Worker*, p. xvii.

be almost universal ; in all districts, at all ages, in all trades there is this vast mass of wasted life and energy due for the most part to preventable maladies in their turn largely attributable to remediable conditions of industry or to the neglect of hygiene." ¹

In this connection the wise words of the Health of Munitions Workers Committee are worth quoting : " There must be," they said, " a proper distribution of function of labour, a correct understanding of the part played by nutrition, by rest, by fatigue, by health conditions, if waste is to be avoided and maximum energy attained. The human being is a finely-adjusted physiological instrument, which must no longer be wasted, much less destroyed, by ignorant or wilful misuse. A working man's capital is, as a rule, his health and his capacity to perform a full day's work. Once that is impaired or damaged beyond recuperation two things happen : First, his whole industrial outlook is jeopardised and he becomes by rapid stages a liability, and even a charge on the State. Secondly, if the bodily defence is undermined by stress and strain the man falls a ready prey to disease." From the standpoint of the community, and in the long run that is the standpoint of the citizen, the result is doubly waste. The man becomes unproductive, and thus a loss to industry, and his support then becomes a burden on the community as a whole.

Much evidence has been collected with regard to the influence of occupation on mortality and morbidity. In Great Britain and in certain other countries, Government reports are prepared, showing the proportionate mortality in certain occupations from various specially prevalent diseases. The following table, extracted from the Occupational Mortality Report of the Registrar-General issued in 1922, gives the comparative mortality figures in several important occupations of a dusty character :—

¹ Sir George Newman in Collis and Greenwood, *The Health of the Industrial Worker*, p. xviii.

DEATHS IN STANDARD OCCUPATIONS AT AGES 25-65.

	All Causes	Phthisis	Alcoholism and Cirrhosis of Liver	Bronchitis	Pneumonia.	Cancer	Suicide.	Accident.
Coal miners .	727	76	9	51	64	61	11	118
Iron miners .	652	73	5	37	76	56	15	93
Tin miners .	1579	684	—	76	95	93	—	95
Lead miners .	1185	335	—	50	49	82	—	96
Stone masons .	951	237	13	60	66	74	16	67
Tool makers .	1010	308	10	68	74	76	20	25
File makers .	1529	434	15	88	127	78	28	28
Cutlery, scissors makers .	1285	466	12	82	83	106	29	23
Tinplate goods makers .	1072	243	35	84	88	97	29	25

Statistics relating to the influence on morbidity and mortality of occupation are particularly liable to error. An investigation made by Sir A. W. Watson, the Government Actuary, showed that the sickness and mortality rates of Friendly Society experience were but little related to each other, and that geography governed mortality more than occupation, while the reverse held good for sickness.¹ A great difficulty in estimating the influence of occupation on health arises from the fact that occupations do not, so to speak, start even. Some occupations naturally attract strong men, others weaklings. A weakling will not become a navvy, but rather a tailor or a shopman. Occupations demanding great muscular strength and activity to some extent consist of picked men, physically, owing to the fact that weaklings draft themselves into lighter occupations.

From the health standpoint, the disadvantages under which the industrial worker suffers are due not merely to the specific dangers of the particular trade in which he may

¹ A. W. Watson, *The Methods of Analysing and Presenting the Mortality and Sickness Experience of Friendly Societies*, with examples, etc., 1900.

be employed, but also to the general conditions in which industrial life is carried on. The modern industrial order has involved, as we have seen, an intense concentration of the people in towns. And the unhealthful conditions of town life are beyond question. "The maleficent influence of town life, especially in its earlier unregulated stages, is due to many factors. Streets have taken the place of green fields; rows of unsatisfactory dwellings have replaced country cottages, there is dust and belching smoke and noise instead of sunshine and country air and quiet; bustle and turmoil instead of life in close touch with mother earth; a preponderance of indoor in lieu of outdoor occupations; and these changes have been associated with an almost unlimited inter-communication of human beings, and a corresponding increase in opportunities for the transmission of infection." ¹

Statistical studies of the influence of density of population upon mortality appeared for many years in the English Registrar-General's report. In the earliest of these studies, published in the Fifth Annual Report in 1843 by Dr. William Farr, it was maintained that the mortality increases with the density of the population, not in direct proportion to the density, but in the sixth root. Thus, if d and d' = density of population in two places, and m and m' = mortality of population in two places, then $m' : m :: \sqrt[6]{d'} : \sqrt[6]{d}$.

Further light has recently been thrown on the problem by Dr. John Brownlee in 1922, which seems to show that "it has been rendered probable that the inhabitant of the country is at the ages 55-65 biologically about six to seven years younger than the inhabitant of the town." ² Some of the unfavourable conditions of life in the town have been, and are still being, improved. Even such conditions as

¹ Sir Arthur Newsholme, *The Elements of Vital Statistics*, London, 1924, p. 275.

² Quoted by Newsholme, p. 283.

excessive noise and vibration, the deficiency of sunshine, and the excess of smoke and dust, which are particularly unfavourable, are to some extent remediable. Some of the remedies are, indeed, comprised within the inner logical development of the industrial system itself. Excess of smoke is being done away with by the increasing substitution of electricity for steam. The sun will again be seen when the pall of smoke disappears and when, as a result of the electrification of industry and the advent of the cheap motor car, the population again spreads itself over the face of the deserted country.

§ 7. Maladjustment.—The social waste due to unnecessary fatigue and to industrial accidents and sickness is as nothing compared to the waste that results from maladjustment of the worker and his work, in other words, the existence of the square peg in the round hole.

The waste due to lack of initial good adjustment of the worker and his work may show itself in three main forms. There is first the waste due to a false start or a series of false starts being made by a boy who only learns by frequent changes from one job to another that one occupation or a series of occupations are unsuited to him. As a result of observation in the United States, it was found that more than one-third of all telephone operator apprentices were obliged to give up their work during the first year owing to overstrain. And it is well known that it is usual for boys before settling down in any one occupation to try several, acquiring a little habituation and skill and then losing it all when they go to try the next. During the War I found, when interrogating young soldiers, in connection with the War Office scheme of preparation for demobilisation, on the occupation to which they belonged, that some could enumerate ten or a dozen different kinds of jobs on which they had been engaged for a few months each, but found great difficulty in saying that any one of them could be regarded as their regular occupation. If this process of

hit-and-miss, or trial-and-error, resulted in the discovery by the worker of the job which really suited him, there would be some justification for defending it as a rough empirical method of reaching a desired end. But too often the consequence of such "chopping and changing" is to render the worker mentally and physically unfitted for any kind of really concentrated and steady work.

The second kind of waste is that due to labour turnover. Labour turnover is not always, or perhaps even usually, due to the fact that the worker is working on work for which he is unsuited. It may frequently be due to a legitimate dissatisfaction of the worker with his conditions of labour and a belief that he will find better by moving on to another factory. But it cannot be doubted that it is often due also simply to a desire for change owing to the fact that the job itself is uncongenial. This is suggested by the fact that in the United States, where the workman is not so apt to remain in an uncongenial job as in England, the phenomena of labour turnover have been particularly noticeable.

A third form of waste due to the lack of adjustment between the worker and his work is seen in the case of workers who, in spite of having work for which they are not suited, continue to do it. Such persistence may be evidence of admirable moral qualities, but from the standpoint of the community it is pure waste. The worker, employed on work for which he is not fitted, will necessarily be unable to produce the same output as those who are suited to the work, or, if he does, it will be at the cost of mental or physical overstrain to himself. How much unnecessary fatigue and how much inefficient work is due to this cause cannot be statistically estimated, but it cannot be doubted that it is very great.

Statistical evidence is, however, available with regard to one aspect of this inefficiency, namely, the inefficiency of tramway and engine drivers resulting in accidents. Half a century ago it was recognised that shipping and railway

accidents were frequently due to the failure of pilots or locomotive engineers, suffering from colour-blindness, to distinguish certain signals. More recently, the American Association for Labour Legislation, impressed by the large number of street accidents caused by electric tramways (some American companies had to compensate 50,000 cases of accidents per annum) invited Professor Münsterberg, as Director of the Psychological Laboratory of Harvard University, to investigate the psychological causes of errors made by tramway drivers. Münsterberg began laboratory investigations into the special abilities required by tramway drivers, and when appropriate tests had been applied to drivers already employed, it was found that about 25 per cent of them ought to leave the occupation for some other for which they were better fitted.

And a considerable proportion of the industrial accidents which we have already found to involve great waste to the community are probably also due to the same lack of adjustment of the worker to his work.

Though the problem of vocational guidance and selection is as old as humanity itself, it is only in recent years, with the increasing specialisation of industrial processes, that its importance has become fully evident. Even in the earliest society, where all men were "hewers of wood and drawers of water," some instinctive preference must have been manifested by individuals either for hewing wood or for drawing water. In primitive communities, the strength of a man's instincts would largely determine the function he would fulfil. Those in whom the instinct of pugnacity was strong would become the fighting men, those whose acquisitive instinct was prominent would become merchants, the instinct of curiosity would prompt others to become priests or medicine men, and so on.

In the modern world, too, it is desirable for workers entering particular callings to be certain, as far as they can be certain, that their predominant instincts fit them for

such a calling. It is probable, for instance, that in the modern world boys in whom the instinct of curiosity is strong will become men of science and research workers, those in whom pugnacity is prominent will become soldiers or sailors or pioneers of one sort or another; those, again, in whom the acquisitive instinct is early and strongly developed will enter the great army of commerce.

The importance of the movement of vocational guidance and vocational selection resides in the conviction that it is possible by an application of psychological tests, to determine what occupation a young person is mentally and physically fitted for by instinct and training, and to encourage the young worker to enter and persevere in that occupation. The philosophy of the movement involves, perhaps, a departure from the principles of "My Station and its Duties," the classical expression of which was given by F. H. Bradley, but only in so far as it insists that *laissez-faire* methods do not necessarily mean that the citizen finds the station in which he can best serve both himself and the community. The ideal of vocational guidance is to help the young citizen to discover that function in life which he can do best, and thus in loyalty to his vocation be loyal to the State.

From the earliest times, some effort has been made to adapt work to the worker and the worker to work. Persons whose unsuitability for certain types of work, on account of physical defect, was obvious, were naturally excluded. For other kinds of work, e.g. admission to the army or the civil service, some sort of test, mental or physical or both, was applied.

But these traditional methods are extremely crude and vague. The selection was very haphazard. A sieve might, indeed, be used, but this sieve was often either too coarse or too fine, with the result that a crowd of unsuitable candidates might be admitted to an occupation, while others really well fitted might be excluded. And most young

persons continued to go into occupations traditional in their family or in their locality.

The first endeavours to put vocational guidance on a basis at once practical and scientific were made in New York by Parsons, and at his suggestion, by Mrs. Shaw in her Vocational Guidance Bureau in Boston in 1908. And in 1907 at Basle an office was founded by Stocker to advise parents and young people on the choice of an occupation. Subsequently, vocational guidance offices or institutes were established at Amsterdam, Barcelona, Berlin, Bordeaux, Brussels, Geneva, London, Strasburg, Prague, Zürich, and elsewhere.

A leading rôle in the movement is now being played by the British National Institute of Industrial Psychology, under the experienced direction of Dr. C. S. Myers.

In the meantime, experimental psychology was making progress in its application to the problem of the analysis of abilities. Cattell in the United States, Kräpelin and Stern in Germany, Binet and Toulouse in France, Decroly in Belgium, de Sanctis in Rome, Rossolimo in Moscow, Heymans at Groningen, and others, endeavoured by drawing up special mental tests to analyse the various psychological characteristics of individual members of society. Efforts were also made in London by Spearman, Pearson, Thomson, and Brown to investigate by new methods of measurement the constituent elements of abilities.

The movement for the application of these investigations to the problems of vocational guidance and selection was greatly accelerated in the belligerent countries by war necessities. The man-power problem, vital for all the Powers in conflict, demanded not only that each man and woman should be employed where he or she could be most productively utilised, but also that no time should be lost in finding him his proper niche. It was in the United States that the most extensive use was made of the principles of vocational selection. There a staff of experts was engaged

in applying tests for estimating the educational level and intellectual ability of each recruit, in recording their pre-war experience and in devising and applying appropriate tests to prove their special qualifications, and in inventing and applying tests for the selection and training of telegraphists, gunners, and others.¹ The value of these tests has been much discussed, but it is now generally agreed that they saved many months of needless camp life, and that they contributed very greatly to putting the right man in the right place.

In other countries also the exigencies of war enlisted the help of the psychologist. In Britain, candidates for training in hydrophone listening for hostile submarines were carefully tested for the Admiralty, certain candidates for the Air Service underwent special tests as regards sense of hearing and equilibrium, stereoscopic vision and the rate of the adaptation of their eyes to darkness. In other countries, too, psychological tests for aviators were applied, at Paris, Turin, Brussels, and Hamburg. According to Dr. Brabant of Brussels, the number of accidents due to the inefficiency of the pilot decreased by 60 per cent.²

So far, the words "selection" and "guidance" have been used without any distinction. It should be noted, however, that vocational guidance, according to the definition adopted by the International Conference at Barcelona in 1921, strictly refers to the choice of an occupation for an individual, and vocational selection the choice of an individual for a given occupation. Thus, vocational selection chiefly interests the employer, and vocational guidance the worker. But this distinction is no exclusion. It is to the interest both of the employer and the worker, and certainly the interest

¹ Yoakum, C. S., and Yerkes, R. N., *Army Medical Tests*, New York, 1920.

² Première Conférence internationale d'orientation professionnelle in *Arch. de Psych.*, xviii., 177.

of the community, that the right man should be put in the right place.

It is true, however, that the difference of emphasis is a real one. If an employer wishes to find twenty suitable persons for a given job, and after employing the methods of vocational selection chooses twenty from among a hundred applicants, he gives no thought to the remaining eighty. Vocational selection has solved the problem of the employer and also of the successful twenty, but the problem of the unsuccessful eighty remains unsolved.

On the other hand, the aim of vocational guidance is to discover the most suitable occupation for a given individual with given abilities. It occupies itself with all who seek its help, and will not be content until it has placed all the workers where they are best fitted to work. If its purpose be considered primarily individual, it should be remembered that in serving the interests of the individual it is at the same time contributing to the welfare of the community, by ensuring that the best use is made of the abilities of the individual member of society.

In detail, the object of vocational guidance is to advise individuals as to the occupation which is most suited to their mental or physical abilities, and in which, consequently, their chances of success are greatest. In order to give this advice wisely, three things must be known: The specific abilities required for various occupations; the specific abilities possessed by the particular individual to be advised; and thirdly and equally important, the prospects of employment in various occupations. It would clearly not be scientific, and it certainly is not common sense, to advise an individual, however well-suited for a given occupation, to enter it if the occupation is already grossly overcrowded.

It would take us too far afield to examine the methods which have been adopted, as the result of elaborate psychological investigation, for the analysis of different occupations

and the diagnosis of the individual's abilities.¹ The psychological analysis of occupations is generally effected by a combination of three methods: (1) enquiry, verbal and by questionnaire; (2) observation; and (3) experiment. As a result of the application of these methods, information of a more or less reliable sort may be collected as to the sensory, mental, and motor abilities needed in various occupations, and also the types of temperament and character which they require. The use of the same methods, with an emphasis on objective mental tests, supplies a more or less accurate diagnosis of the individual's special abilities. The work of the vocational guidance bureau is, after determining an individual's special abilities, to decide in accordance with the classification and analysis of occupations what occupation the individual is best suited to enter, keeping in mind the practical chances of securing employment in that occupation.

And what are the practical results of vocational guidance and selection?

Although the whole movement is still in the experimental stage, the results already obtained are remarkable. A striking instance is quoted by Dr. Myers.² In a certain bicycle-ball factory, after methods of vocational selection had been employed in the engagement of girls to detect defects in the balls, it was found possible to increase the output by over 240 per cent., and to increase the accuracy of the work by two-thirds.

Special success has also attended the application of psychological tests in the selection of applicants for telephone exchange work in the United States. Such qualities as acuity of hearing, clearness of speech, ability to interpret indistinct words, span of memory for figures, speed and

¹ The best general accounts of the methods and principles of vocational guidance and selection are: E. Claparède, *Problems and Methods of Vocational Guidance*, 1922; and J. Fontègne, *L'Orientation professionnelle*, Paris, 1921.

² *Mind and Work*, p. 89.

dexterity of reaction to signals, are all readily capable of experimental estimation ; and in practice, the selection of candidates in accordance with the results of these tests has led to an increase in the efficiency of the service rendered to the community and a decrease in the tendency of the operators to nervous breakdown.

Vocational guidance and selection is important not only in the interest of the avoidance of industrial waste, and the harmonious organisation of society, but also as a means of contributing, through proper adjustment of individuals to perform those social functions for which they are best fitted, to the happiness of the individual and the welfare of the community. And what more does good citizenship mean ?

§ 8. **Labour Turnover.**—Labour turnover, in part a consequence of the maladjustment to which reference was made in the previous section, is an inevitable feature of the modern industrial order.¹ Industrial progress would, in fact, be seriously retarded if ambitious workmen never quitted one factory in order to get a better job in another, or if the employer were never to dismiss an indifferent operative. Change and movement, as Heraclitus pointed out, are

¹ The question of "labour turnover" has been more elaborately studied in the United States than in Great Britain, and it is only there that it has been precisely defined. According to the U.S. Bureau of Labor Statistics, "Labor turnover for any period consists of the number of separations from service during that period. Separations include all quits, discharges, and lay-offs, for any reason whatsoever. The percentage of labor turnover for any period considered is the ratio of the total number of separations during the period to the average number of employees on the force report during that period. The force report gives the number of men actually working each day as shown by the attendance records" (U.S. Bureau of Labor Statistics: *Standard Definition of Labor Turnover and Methods of Computing the Percentage of Labor Turnover*). Dr. P. Sargant Florence's definition may also be quoted: "Labour Turnover, alternatively called Labour Maintenance, Labour Recruitment, or Labour Wastage, is the fluctuation in the personnel of an organisation" (*Economics of Fatigue and Unrest*, p. 137).

characteristics of life, and no vital industrial system can exist without a certain degree of labour turnover. To use a physiological simile, just as the human body is healthy when metabolism takes place in the "just right" degree, while excessive or inadequate metabolism are signs of disease, so the body of industry is healthy when labour mobility occurs in the "just right" degree; it is unhealthy when it occurs in an excessive or insufficient degree.

An industrial system, such as at one time existed in Soviet Russia, in which a workman, however inefficient, cannot be dismissed from a factory is clearly not healthy. Paralysis has set in. At the other extreme we find the feverish conditions in certain American industries, where labour turnover exceeds all reasonable limits.

There is, then, a "just right" degree of labour mobility, a natural ebb and flow, a symptom of healthy conditions in industry. And this "just right" degree of labour mobility is not only conducive to the welfare of industry as a whole and, ultimately, through the avoidance of waste, to the welfare of the community, but it is also to the advantage both of the employers as a class and to the workers as a class. The "just right" degree of labour mobility is an important economic and social condition of citizenship. A few examples will make this clear.

Our first example is taken from the statistics collected by the United States Bureau of Labour Statistics. These show that in the year 1917-18, in the maintenance and enlargement of a labour force of 305,901 workers in certain industrial establishments a total of 1,244,640 labour changes were involved in a period of twelve months, viz. 631,173 accessions and 613,467 separations.¹ This is equivalent to more than two complete overturns of the working force during the year. To put the same thing in other words, it is equivalent to a situation in which during the twelve

¹ Brissenden and Frankel, *Labor Turnover in Industry*, New York, p. 38.

months all the employees left their job, an entirely new set came in to fill their places and afterwards all the employees in the second set left their jobs and had, in turn, been fully replaced by a third set of workers. It is abundantly clear that such complete and rapid labour turnover involves great economic waste. From the standpoint of the employer, each change involves a certain amount of time lost owing to each new worker's need to accustom himself to the conditions of his new work. A certain skill, or at any rate a certain habituation, must be acquired anew by each new worker. It is not to be wondered at, then, if a large number of American employers are fully alive to this source of waste. They rightly regard excessively numerous terminations of employment and voluntary separations as a serious obstacle to efficient and continuous operation. They are also concerned at the enormous expenditure involved in the excessive labour replacement required for the maintenance of the normal work force. Various endeavours have been made to arrive at the actual monetary cost of each case of labour turnover. A careful estimate made in 1912 by Mr. Magnus Alexander, now President of the National Industrial Conference Board of the United States, which analyses cost under the heads of (1) engagement; (2) instruction; (3) abnormal wear and tear of machinery; (4) reduced production; and (5) spoiled work, concludes that the average cost to the employer of each case of labour turnover is about \$36. Estimates have also been made in England. Professor Collis¹ puts the cost to the employer at £2 10s., adding another £2 10s. as the cost to the worker. Dr. G. N. Miles,² Secretary of the National Institute for Industrial Psychology, who has also dealt with the problem, does not attempt to give any estimate of average cost, but he points out that each worker may cost a firm from £2 to £50 to train, and the period of training, even in the simplest

¹ *The Health of the Industrial Worker.*

² *Westminster Gazette*, January 10, 1923.

occupation, before a worker reaches full output, is as much as three months. And Dr. Sargant Florence¹ adds that although the output of the newly-hired worker is below the normal, he must be provided with the same amount of heating, lighting, and ventilation as the experienced worker, and his machine requires the same power. In fact, so far as all overhead costs, interest, taxes, rates, insurance, and rent are concerned, he counts for exactly the same as the experienced worker. It is only in output that he differs, and differs tragically. The cost of all this waste is, of course, passed on to the consumer, and the community as a whole suffers.

From the standpoint of the individual worker, also, too frequent change means loss. A worker gets into the habit of changing his work frequently for little or no reason, with the necessary consequence that he acquires no special skill or habituation in any particular job, his moral qualities of perseverance and self-discipline are not developed, and in every respect he gradually becomes a less and less valuable member of the community. In extreme cases he becomes incapable of sticking to any job more than a few days. This is strikingly illustrated by some facts obtained by an investigator of the United States Commission on Industrial Relations, in 1914, regarding the work records of labourers applying for work at the State Free Employment Office, Milwaukee, Wisconsin. One of these men had had 72 jobs in 10 months 19 days, or one job in every $4\frac{1}{2}$ days, another had established the record of 59 jobs in 6 months 8 days, or one job in every $3\frac{1}{2}$ days. These are, of course, extreme cases. But statistical records, based on extensive investigation, show that workers may be roughly divided into two classes, stable and unstable, and that the unstable are much more numerous than might be expected. Brissenden and Frankel² publish figures based on returns from 53 establish-

¹ *Economics of Fatigue and Unrest*, p. 142.

² *Labor Turnover in Industry*, p. 145.

ments with a working force, on May 31, 1918, of 69,553. Of these 62 per cent. had been with their firms one year and over. The remaining proportion of the total work force, 38 per cent. or a total of 26,232 workers, was therefore responsible for all the labour turnover of the year. Now, in these 53 establishments, during the year, the labour flux (i.e. accessions *plus* separations) amounted to 189,413 persons. This means that for every worker on the unstable work force more than three persons were hired and nearly four persons left employment, involving altogether more than seven labour changes for each worker, in the course of the year. It needs no emphasis that neither the worker nor the employer benefit by such frequent changes.

So far we have been illustrating our view that excessive labour movement is disadvantageous to the worker as a worker and a citizen, to the employer, and to the community as a whole.

It is none the less clear, on the other hand, that deficient labour mobility is good neither for the community, the employer, nor the worker himself. If mobility is practically impossible, the employer must continue to employ inefficient or unsuitable workers, and the worker is unable to seek the job for which he is most fitted and in which he can render most efficient service. In both cases alike it is ultimately the community that suffers. The system in which labour movement is reduced to the absolute minimum is the system of slavery; and few would venture to affirm that in the modern industrial order slavery would be a desirable institution.

If we agree that there is a "just right" or normal degree of labour turnover, which does not involve social waste but represents the progressive readjustment necessary in any living organism, can we give any definition, or at any rate any indication, of the meaning of "just right" labour mobility? Attempts have been made by American investigators to fix 25 per cent. per annum as the minimum

of "necessary" turnover, account being taken of separations for unavoidable reasons, such as death, invalidity, definite unsuitability, voluntary resignation to obtain better jobs, and so on. But such numerical estimates do less than justice to the complexity of the problem. All we can say is that mobility is "just right" when the employer is in a position to discharge men owing to established physical disability or unsuitability for the particular work concerned, and when the worker is free and able to resign his work when he sees an opportunity of work for which he is better fitted and which meets his needs as a worker and a citizen. If these two conditions are fulfilled, we will have a "just right" degree of labour mobility which, involving no social waste apart from what can be covered by insurance, will contribute to the well-being of the community and of every citizen within it.

§ 9. Labour Disputes.—We now pass to consider another source of industrial waste, strikes and lock-outs. Between strikes and lock-outs on the one hand and labour turnover on the other there is a striking parallelism. Labour turnover is in general due to action on the part of the individual employer or workman taken in his own economic interests. Strikes or lock-outs, on the other hand, are forms of collective action on the part of groups of workers or employers in the economic interests of the union or association to which they belong. In each case action is taken in accordance with economic interests; in one case, however, the action is individual, in the other it is collective. Labour turnover, as we have seen, is due in general either to voluntary "quitting" or resignation on the part of the worker, because he thinks he can "better himself" by so doing, or to discharge or "laying off" by the employer, because he considers the workman unsatisfactory or because the needs of his business no longer require so many workers. A strike or a lock-out is declared because an employer, or much more frequently a group or association of employers,

on the one hand, and a group of workers, or more frequently a trade union, on the other, cannot agree that the conditions of service offered by the employer or the conditions claimed by the worker are in accordance with what each side considers to be in conformity with its economic interests.

From the standpoint of citizenship, an important difference between the strike or lock-out on the one hand and labour turnover on the other is that the former involves loyalty. One reason why strikes are often maintained with such determination and bitterness is that each worker is moved, not only or perhaps not mainly by the desire to gain increased wages or a shorter working day, but by loyalty to the claims of his union. And this loyalty is often inspired by a passionate and almost religious conviction of the justice of its cause. This was illustrated with special clearness in the case of the great railway strike of September-October, 1919, in regard to wages and conditions of work. A feature of that strike was the explicit recognition by the Government, which was then still controlling the railways, and the railwaymen that the arbiter of the justice of their respective attitudes was the public opinion of the community. By press advertisement, poster, cinema slides, and in other ways, both parties brought their respective contentions to the bar of public opinion. In its posters and advertisements the Government asked the man in the street : " Is the strike justified ? " and the railwaymen did everything to secure from the community a verdict in their favour.

But even if it be admitted that disputes may sometimes be necessary and right, it remains true that an enormous amount of economic waste results from loss of working days owing to industrial disputes. This is clearly shown by the statistics compiled in England and America by the Government Labour Departments.

In England, according to figures published by the Board of Trade and (later) the Ministry of Labour, during the fourteen years 1899 to 1913, some 111 million working days

were lost owing to industrial disputes. Immediately after the war the number of days lost owing to disputes greatly increased. In the three years 1919 to 1921 approximately 147 million working days were lost, or more than in the fourteen years immediately preceding the war. After 1921, however, the number of days lost owing to industrial disputes greatly decreased until 1926. In the four years 1922-1925 only 47,000,000 days were lost.¹ It will be seen that while this figure shows a great decrease from the staggering figures of 1919-1921, it is still considerably higher than the pre-war average.

In the United States also the most noteworthy feature of the figures is the great increase since the war. During the twenty-five years 1881 to 1905, about $7\frac{1}{2}$ million workers were affected directly, and a further 2 million indirectly, by industrial disputes. Each dispute lasted on the average 30.8 working days, so that the total number of working days lost was in the neighbourhood of 290 million, or about $11\frac{1}{2}$ million per annum. In the six years 1916-1921, on the other hand, over $10\frac{1}{2}$ million workers were involved in industrial disputes, and each dispute lasted on the average 30.3 days. The total number of working days lost was therefore approximately 325 million, or about 54 million per annum.

These figures represent serious economic waste, resulting in loss of profits to the employer, loss of wages to the worker, and higher prices to the consumer. Is there no way in which, in accordance with the claims of citizenship, this waste could, in part at least, be avoided? The answer is that attempts can be made to avoid them in precisely the same way as attempts are being made to avoid war, namely, by conciliation and arbitration. The growth of industrial conciliation and arbitration is in strict accordance with the development of citizenship. In a primitive stage of development of the industrial order, industrial disputes involve

¹ *Ministry of Labour Gazette*, June, 1926, p. 201.

intimidation on the one hand and sabotage on the other ; in a more advanced stage industrial disputes are settled by the strike or lock-out ; in the third stage, which we are just beginning to approach, they will be settled by discussion between the parties and, if need be, by appeal to the public opinion and public sense of justice of the community.

What, then, has been done to make arbitration and conciliation realities in the industrial world ? Though these methods for the peaceful settlement of industrial disputes are now applied to a greater or less extent in all industrial countries, it was in Great Britain that they first began to be used on a large scale, and it is in the British Dominions that their development has perhaps been most remarkable.

Before the war in Great Britain official conciliation and arbitration machinery was provided by the Conciliation Act of 1896.¹ Under that Act the Board of Trade could take such action as seemed expedient to promote an amicable settlement of a difference, or on the request of either interested party, could appoint a conciliator to assist in securing a settlement, but could appoint an arbitrator to determine a dispute only with the concurrence of both parties. Not as much use was made of this Act as might have been expected. This was not due to any lack of a desire to apply conciliatory methods in industrial relations. It is rather to be attributed to the fact that it was a traditional feature of industrial relations in Great Britain that in many trades permanent voluntary Conciliation Boards had been established by agreement between employers and work-people, unsupported by legal enactments, and dependent for success only on the goodwill of the parties.

These voluntary Conciliation Boards, or other suitable arrangements for the settlement of labour disputes, had been set up in all the well-organised industries, and were instrumental in settling large numbers of disputes. There were

¹ *Twelfth Report of Proceedings under the Conciliation Act, 1896 ; General Report, 1914-1918.*

certain important industries, however, in which the employers or workpeople, or both, were not organised, and in which no permanent procedure had been established.

During the war it became clear that the Conciliation Act was inadequate to meet the needs of the war period, and steps had to be taken to strengthen it. The steps that were taken were naturally hurried and the procedure that was developed was empirical, but the experience was in itself interesting and important, and it led directly to the passing of the Industrial Courts Act, 1919, under which a regular and permanent system of voluntary arbitration was provided for.

Prior to the war, and since the war, the systems of arbitration applied in Great Britain have rested on a purely voluntary basis. During the war, however, and in order to meet its special circumstances, the possibility of compulsory arbitration was introduced. The Munitions of War Act, 1915, included provisions for compulsory arbitration at the option of the Board of Trade and prohibited strikes and lock-outs in certain circumstances. This step was a definite break with the voluntary procedure which had for many years prevailed in regard to labour disputes. It was made necessary by the war; and as soon as the war came to an end, the provisions relating to compulsory arbitration and the prohibition of strikes and lock-outs were at once repealed.

Compulsory arbitration has never been popular in Great Britain. At trade union congresses resolutions in favour of compulsory conciliation and arbitration have always been defeated by large majorities. Further, the Committee on Relations between Employers and Employed (Whitley Committee), in its Fifth Report, issued January, 1918, stated:—

“ We are opposed to any system of compulsory arbitration; there is no reason to believe that such a system is generally desired by employers and employed, and, in the absence of such general acceptance, it is obvious that its imposition would lead to unrest. The experience of com-

pulsory arbitration during the war has shown that it is not a successful method of avoiding disputes, and in normal times it would undoubtedly prove even less successful. Disputes can only be avoided by agreement between employers and workers and by giving to the latter the greater measure of interest in the industry advocated in our former reports ; but agreement may naturally include the decision of both parties to refer any specified matter to arbitration, whether this decision is reached before or after a dispute arises.

“ For the same reason we do not recommend any scheme relating to conciliation which compulsorily prevents strikes or lock-outs pending inquiry.”

At the same time the Committee made the following recommendations :—

“(a) Whilst we are opposed to any system of compulsory arbitration, we are in favour of an extension of voluntary machinery for the adjustment of disputes. Where the parties are unable to adjust their differences, we think that there should be means by which an independent inquiry may be made into the facts and circumstances of a dispute, and an authoritative pronouncement made thereon, though we do not think that there should be any compulsory power of delaying strikes or lock-outs.

“(b) We further recommend that there should be established a Standing Arbitration Council for cases where the parties wish to refer any dispute to arbitration, though it is desirable that suitable single arbitrators should be available, where the parties so desire.”

It was clear that there was a general desire in the country for permanent arbitration machinery, and that there was an equally general desire that this arbitration machinery should not be compulsory. An attempt was made to satisfy these two general desires, and the Industrial Courts Act of 1919 was passed.

This Act has two main provisions. It sets up, in the first place, a Permanent Court of Arbitration, to which recourse can be had by parties to industrial disputes if both parties to the dispute consent. In the second place, it makes provision for the appointment by the Minister of Labour of a Court of Inquiry in the case of disputes, whether apprehended or existing. One of the main objects of such a Court of Inquiry is to put before the public an impartial account of the merits of the dispute. Courts of Inquiry have no legal power to settle disputes by arbitration. But their moral authority, based on the publicity which has been given to their hearings and findings, has proved so great that in almost all cases their recommendations have been accepted by the parties to the dispute.

Alongside this machinery, valuable services in the interests of industrial peace have been rendered since the war by the joint industrial councils set up in accordance with the report of the Whitley Committee. Among the functions assigned to them by the Whitley Committee was the "establishment of regular methods of negotiation for issues arising between employers and workpeople with a view both to the prevention of differences and to their better adjustment when they appear." In accordance with this function the constitution of a large number of councils provides that no stoppage of work shall take place until the matter in dispute has been considered by the council. In certain cases where such provision was not included in the original constitution, the principle has been adopted by joint resolutions.

Certain councils and reconstruction committees have adopted formal procedure as to mediation, conciliation, and arbitration in labour disputes. Even where no formal procedure has been established, matters of difference may be brought forward in the usual manner in suitable cases, through the works committees and district councils to the national council.

A report on the work of the councils, published by the Ministry of Labour, states that the work of the councils and reconstruction committees in preventing stoppages of work has been attended with a very considerable measure of success, "a fact due in the main to the task of mediation being undertaken by the members of the industry themselves with the minimum of formality and delay. It must also be borne in mind that in many cases where the establishment of special machinery has not been considered necessary, the mere existence of a joint industrial council on which the organisations on both sides are constantly in touch has been effective in obviating disputes."¹

Why, it may be asked, if all this conciliation and arbitration machinery can be regarded as having produced good results, has the number of days lost owing to strikes and lock-outs nevertheless increased? The answer is that the war years, and still more the period since the war, have been extremely difficult from the standpoint of industrial peace. During the war the cost of living rose rapidly, and wages had to rise too, to enable the workers to live at all. After the war there was first a rise in the cost of living, when it had been expected that it would fall, and then a sudden, and to some extent unexpected, fall. Add to this that the workers were not content, after the war, to conduct wage negotiations empirically on the standard of 1914. They raised questions of principle. They demanded that consideration should be given to such problems as the real meaning of a "wage," whether it should be merely sufficient to supply the ordinary needs of existence, or whether it should be determined by the value of the work done, and, if so, how the value of the work done was to be estimated. It is safe to say that if conciliation machinery, with its provision for regular, amicable, citizen-like discussion, had not been in existence, industrial dislocation and resultant

¹ *Report on the Establishment and Progress of Joint Industrial Councils, 1917-1922*, p. 105.

waste owing to strikes and lock-outs would have been much more serious than they were.

§ 10. **Unemployment.**—Among the sources of industrial waste, it would be difficult to find one more economically serious than unemployment, or one more detrimental to the physical welfare and the spiritual well-being of the citizen. The extent of the problem is formidable: a conservative estimate would place the number of men and women unemployed in the world at the beginning of 1926 at not less than ten millions.

In Europe alone official statistics recorded five and three-quarter million unemployed—over two million in Germany, a million and a quarter in Great Britain, a million in Russia, and numbers almost equally formidable in proportion to the population of smaller countries. There is always a certain number, sometimes large, of unemployed not registered, and some countries have no statistics, so that seven millions is not an exaggerated estimate of the number of unemployed in Europe.

In Australia, Canada, and New Zealand trade union returns showed nearly fifty thousand unemployed. In the United States it has been estimated that even in times of abounding prosperity there may be anything from half a million to a million workers unemployed. Over and above these there are the vast populations of China, India, Japan, the whole of South America and Africa, where even slight unemployment would send the figures up by the hundred thousand.

Ten million workers idle, and the necessities they could produce are lost to a world where poverty is still more common than wealth, or even comfort. It is a moderate estimate that on an average each of these unemployed workers has two people dependent on him or her. At least thirty million men, women, and children, then, are suffering through unemployment.

From the strictly industrial standpoint, these figures are

indicative of appalling waste. It is serious industrial waste if factories or blast furnaces are closed for lack of orders, but in these cases, while there is a certain amount of depreciation and loss due to the continuance of overhead charges, the waste is on the whole confined to the cessation of production. In the case of the workers, however, the position, from the purely industrial standpoint, is much more serious. Not only do the workers, when unemployed, in addition to ceasing to produce, lose their skill and thus seriously depreciate in value as industrial instruments, but they continue to consume. From the widest standpoint, it makes little difference whether the means to enable them to continue to consume are supplied by the State, by the employers, by their fellow-workers, or, in a casual sort of way by charity; it is, in all cases alike, sheer economic waste that the community should not only keep a considerable proportion of its citizens unproductive but also demand of its other citizens more production in order that the unproductive ones may consume. From the economic standpoint, the existence of the unproductive citizen is waste, whether he be "idle rich" or unemployed.

So far, we have considered unemployment from the standpoint of its economic repercussions. But what of its moral effects on the unemployed citizens themselves? Much has been written on the mental and moral sufferings of the unemployed. But more poignant than any description is the sober statistical finding of a Government enquiry conducted in the United States.

This investigation was carried out by the staff of the Children's Bureau of the United States Department of Labour on the effect of the industrial depression of 1921-1922 on child welfare in two typical American towns—Racine (Wis.), and Springfield (Mass.).¹

The families of 366 men, about two-thirds of whom had

¹ U.S. Dept. of Labor, Children's Bureau: *Unemployment and Child Welfare*, Washington, 1923.

been out of work for twelve months or more, were visited. During the period of unemployment of the men, many of the wives who previously were not engaged in paid employment were obliged to secure work. One hundred and sixteen mothers thus supplemented the family income to some extent. Two-thirds of the families were obliged to go into debt for food ; and loans and other debts, exclusive of credit for food, were reported by more than three-fourths of all the families. The use of savings was reported by almost one-half of the families, and about one-half had become partially dependent upon charitable aid, presumably after other resources had been exhausted.

Varied as the means of livelihood were, they appeared to be totally inadequate to maintain the families in health. The report on this point reads as follows: " Half of the families . . . averaged for their maintenance during unemployment one-half as much as when the father was working. . . . Frugality in food, even to the point of actual privation, a dangerous saving of fuel, economy in clothing and household supplies, reduction of the housing cost through seeking cheaper quarters or crowding the family to secure an income from lodgers, always follow the breadwinner's loss of work."

Finally, the report comments on the demoralising effect of unemployment on the family as a whole. " The most important feature of unemployment is its effect on the family morale—the father idle about the house, unsettled, disheartened ; the mother going out to work if she can secure it, and using up every bit of her strength in the double task of providing for the family's maintenance and caring for the household and the children ; the children suffering from the depression and uncertainty of what the future may mean."

Is there, then, no cure for this disease of modern industry, disabling in its influence alike on the individual citizen and on the economic foundations of the community ?

The remedies for unemployment which have been tried

or suggested fall into two categories: Firstly, those which aim at alleviating the symptoms, with a view to enabling the individual unemployed man to subsist during the period of unemployment with the least physical and moral injury to himself and his family; and secondly, those which aim at preventing unemployment altogether, and thus directly benefiting not only the individual but also the community as a whole.

Into the first category of remedies for unemployment falls the organisation of a system of benefits for workers in case of involuntary unemployment. Such a system has been organised, or is in process of organisation, in practically every important industrial country. To be precise, at the beginning of 1927 nineteen countries had schemes of unemployment insurance in operation. In certain countries, the system is still a voluntary one, consisting generally of a State-subsidised method of insurance administered by trade unions and friendly societies. The general tendency is, however, in favour of a compulsory scheme to which the State, the employers, and the workers all contribute. It should be compulsory, because experience shows that it is precisely those who most need insurance who are least likely to join a voluntary scheme; and it should be contributed to by all the three sides of the industrial triangle, because all have responsibilities in the matter. The State should contribute, because unemployment is often due to causes of a general nature, on which the policy of the Government may have considerable influence. Employers should contribute, because the maintenance of the reserve of workers needed by industry should, in part at least, be at the charge of industry. The workers should contribute, because it is primarily their risk.

In certain countries, and more particularly in England, much discussion has taken place on the desirability of organising unemployment insurance by industries. According to this scheme, each industry would be completely

responsible for the organisation and administration of unemployment insurance for all workers employed in that industry. The argument in favour of such a system is that each industry should be responsible for its own workers, whether in employment or out of it.

But the disadvantages of such a scheme are too numerous for it to be practicable. They have been admirably stated by the National Confederation of Employers' Organisations in the report which it prepared in response to the invitation issued by the Minister of Labour in November, 1922. "Compulsory insurance by industries," says the report, "is, in any event, quite impracticable on any comprehensive scale. There would be considerable difficulty—in very many instances insurmountable—in the strict demarcation between industry and industry. A substantial proportion of workers move from industry to industry; there is also a substantial proportion of workers in respect of which there is no trade organisation, either on the men's side or on the employers'; there are large numbers of workers in seasonal employments and casual employments. From the financial point of view, it would not be practicable for even every well-organised industry to have a workable scheme. . . . The segregation of industries has, in addition, grave objection on the ground of general principle. Insurance is founded upon the principle of averaging. . . . Unemployment insurance, if it is to be compulsory, should be universal and uniform."

The great value of unemployment insurance is not only to protect the individual citizen against destitution during his periods of unemployment, but also to alleviate the anxiety and dread of future unemployment which he often feels during his periods of full employment. It is thus of the greatest importance, from the standpoint of citizenship, inasmuch as it assures a certain stability of the conditions of existence and encourages the growth of a sense of family security. And without this stability and security it is hard for citizenship to develop.

But from the standpoint of the economic interests of the community as a whole, unemployment insurance, however admirably conceived and administered, provides no solution for the problem of unemployment. It does nothing to prevent unemployment, and it throws on the shoulders of the community as a whole the heavy charge of the maintenance of the unemployed. In the interests of the community as a whole, it is obvious that the solution that is needed is one that will actually diminish, to the greatest possible extent, the total volume of unemployment.

Steps in this direction have, indeed, been taken in a number of countries. Such measures fall into two classes: those relating to the distribution of available labour, and those providing for a development of the possibilities of employment.

With a view to the distribution of the available labour, the most important means is the organisation of employment exchanges. A system of employment agencies, such as has been established in a considerable number of countries, is a valuable means of reducing to a minimum the chronic unemployment which is due to the tendency of industry to keep a certain reserve of workers in readiness to meet sudden pressure of work. If each individual factory or even each individual town had its own reserve of unemployed workers, who had no means of knowing whether opportunities of employment were available in the next town, it is clear that the reserve of unemployed workers would, in the nation as a whole, be very large. On the other hand, if there is an efficient system of employment exchanges, such as exists in Great Britain, the size of the reserve can in normal times be reduced to very small limits, for unemployed workers in a given industrial area know, through the exchange, of jobs which may be vacant anywhere in the area, and even, in the case of specialised jobs, anywhere in the country. To the employer who wishes to find workers the exchange

system is similarly an economy of time and money. In connection with the system of employment exchanges, special measures have been taken in certain countries to encourage the vocational rehabilitation and re-training of workers, unskilled or belonging to an overcrowded industry, in some occupation in which a special demand for workers seems likely to develop. Such measures were taken after the war in Great Britain, Germany, Austria, Finland, Norway, the Netherlands, Sweden, Switzerland, and the United States. From the standpoint of the community as a whole, the exchange system facilitates the fullest possible utilisation of the work of the citizens in the interests of the industrial welfare of the community as a whole. It was therefore not without reason that the International Labour Conference, when it considered the question of unemployment at its first Session at Washington in 1919, placed the organisation of public employment agencies among the first measures which should be adopted in all countries to deal with the problem.

The criticism is frequently advanced that a considerable proportion of the unemployed are in reality unemployable. It is said, from this point of view, that while it may be a waste that so many people are unemployed, it is not a waste justly to be attributed to the system of industrial organisation. The fact that they are unemployed, it is urged, is due in large measure to the fact that they are frankly physically unemployable.

A remarkably complete answer to this criticism is to be found in the results of an enquiry made early in November, 1923, by the British Ministry of Labour into the personal circumstances and industrial history of ten thousand claimants to unemployment benefit. These claimants were selected in such a way as to constitute as nearly as possible a representative sample of the whole body of claimants, and it may therefore be considered that the results of this enquiry are true, on the whole, of the whole body of the

unemployed.¹ According, then, to this enquiry, only 3·6 per cent. of the males and 2·0 per cent. of the females were regarded as "verging on the unemployable." And it may be noted that the Report states: "It is possible that some of those placed in the category 'verging on unemployable' had qualities of character or skill which would make them, despite their physical defects, desirable workpeople in special employment."² On the other hand, according to the results of the enquiry, 89·4 per cent. of the men and 88·2 per cent. of the women were persons who in normal times would be either steadily or fairly well employed.

As a necessary conclusion from this evidence, it therefore seems clear that by far the majority of the unemployed are completely capable of work, and that their exclusion from work during their periods of unemployment is due not to any physical or other defect in themselves, but to the badly adjusted working of the industrial machine.

This conclusion is borne out by the evidence supplied by the investigation with regard to the physique and health of the workers. The result of the classification is summarised in the Report as follows :—

	Physique.			Health.		
	Good.	Fair.	Poor.	Good.	Fair.	Poor.
Males . . .	67·5	27·9	4·6	76·0	20·3	3·7
Females . .	74·0	23·1	2·9	81·6	16·0	2·4

¹ But see Report (*Report on an Investigation into the Personal Circumstances and Industrial History of 10,000 Claimants to Unemployment Benefit*, London, Ministry of Labour, 1924), p. 3. None of the claimants could strictly be regarded as "unemployable," because if they were unemployable they would be precluded by the provisions of the Unemployment Act from receiving benefit. That Act applies only to persons who are capable of work.

² *Report*, p. 6.

It will be seen that the proportion of those workers who might be expected to be precluded from regular work by the state of their health or their physique is less than 5 per cent. As a further interesting result of the enquiry, it may be mentioned that when physique is considered in relation to the age of claimants, it appears that, taking all claimants together, between the ages of 18 and 44 the proportions of "good," "fair" and "poor" vary very little and that physique falls off steadily from the age of 45 onwards.

In all the belligerent countries there are, however, considerable numbers of men whose all-round physical aptness for work has been seriously affected by wounds or sickness during the war. The gravity of the problem, from the social standpoint of citizenship, is realised if it is remembered that the total number of men disabled in the war is estimated to be over ten millions. The immense majority of these disabled men, probably at least 80 per cent., are workers. The social loss that would result from the complete absence from employment of these millions of men has stimulated research and action in two directions. On the one hand, science has been enlisted to devise appropriate apparatus of prosthesis to act as substitutes for the limbs that have been lost, and on the other hand, industry has been encouraged to find posts which these men, defective in some specific way, can fill as well as a normal man.

The extent to which science has succeeded, by the provision of artificial limbs, in restoring the vocational capacity of disabled men, is strikingly indicated in an elaborate international survey of progress in prosthesis and orthopædics by Dr. Florent Martin.¹ This shows that there are few cases, not only of military, but also of industrial disablement, in which sound orthopædic treatment and scientific limb fitting cannot contribute largely to restore working capacity. The disabled man does not, of course, become an all-round entirely fit worker. But one of the

¹ *Artificial Limbs : Appliances for the Disabled*, 1924.

discoveries of modern industry is that in a large number of jobs 100 per cent. efficiency may be attained by men who are in some way or other definitely physically defective. An interesting illustration of this is supplied by the results of an enquiry conducted by Mr. Henry Ford to ascertain the kind of men necessary to do the various jobs in the Ford works: "It turned out at the time of the enquiry that there were then 7882 different jobs in the factory. Of these, 949 were classified as heavy work requiring strong, able-bodied, and practically physically perfect men; 3338 required men of ordinary physical development and strength. The remaining 3595 jobs were disclosed as requiring no physical exertion and could be performed by the slightest, weakest sort of men. In fact, most of them could be satisfactorily filled by women or older children. The lightest jobs were again classified to discover how many of them required the use of full faculties, and we found that 670 could be filled by legless men, 2637 by one-legged men, 2 by armless men, 715 by one-armed men, and 10 by blind men. . . . I am quite sure that if work is sufficiently sub-divided—sub-divided to the point of highest economy—there will be no dearth of places in which the physically incapacitated can do a man's job and get a man's wage."¹

That this is not mere theory is seen from the number of sub-standard men actually employed in the Ford works. "At the time of the last analysis of employed, there were 9563 sub-standard men. Of these, 123 had crippled or amputated arms, forearms, or hands. One had both hands off. There were 4 totally blind men, 207 blind in one eye, 253 with one eye nearly blind, 37 deaf and dumb, 60 epileptics, 4 with both legs or feet missing, 234 with one foot or leg missing. The others had minor impediments."²

The employment problem is not merely a national one; it is international. The employment exchange system is based

¹ Henry Ford, *My Life and Work*, p. 108.

² *Ibid.*, p. 110.

on the nation as a unit, but in the modern industrial world, the nation is not a large enough unit. The unit is tending more and more to be the world as a whole ; the labour of the world as a whole must be made available to supply the needs of the world as a whole. In countries in which industrial or agricultural development is relatively far advanced and in which there is a high or relatively high birth-rate, for example, in Great Britain and in Italy, it has for many years been realised that there was not enough work in the country for the rapidly-increasing population, and that opportunities of work would have to be sought in new or undeveloped countries. The extent of these migratory movements is enormous. Before the war, when there were fewer economic, social, and political obstacles in the way of migration, the number of those involved in migratory movements during any one year was generally estimated at something over five millions. Trans-oceanic emigrants numbered approximately 1,750,000 ; Continental emigrants 1,700,000 ; repatriated Continental emigrants 1,250,000 ; and repatriated trans-oceanic emigrants 750,000 ; making a total of 5,250,000. In the period immediately preceding the war, the majority of emigrants came from Italy, Austria-Hungary, and Poland, and to a less extent from Spain and the Balkan Peninsula. This was known as the "new emigration" as distinguished from the "old emigration" from Germany, Scandinavia, Belgium, the Netherlands, and Switzerland, which had greatly decreased in the last few years. There was still a considerable amount of emigration from Great Britain, generally to the British Dominions. The Irish, on the other hand, generally preferred the United States. The great majority of trans-oceanic European emigrants went to the United States, the rest to Brazil, Argentine, Canada, and to Australia. Continental emigration generally turned in the direction of France, Germany, Switzerland, and Great Britain. The war temporarily dammed the migratory streams, and their free flow has

since the war been prevented by various forms of prohibitive or regulative measures.

We must now pass to the measures which may be taken to provide, not for a *redistribution* of workers and work, but for an actual development of the possibilities of employment. The steps which have so far been taken in various countries to secure this end fall into three classes : (a) The organisation of relief works ; (b) the methodical distribution over time of public works with a view to compensating the more or less inevitable fluctuations in private orders ; (c) the encouragement of industries, by protective tariffs and otherwise.

Relief works are works exceptionally improvised during periods of unemployment in order to provide employment for a certain number of the out-of-work. In the past, relief work has often been set on foot merely as a sort of charity ; to-day, it is realised that it should be productive in a wide sense of the term, i.e. it should be something which will not only benefit the men actually employed on it, but will also be of advantage to the community as a whole. And a new and interesting phenomenon, particularly in its bearing on citizenship, is the organisation of relief work, on a sort of self-help basis, by co-operative associations of the unemployed themselves.

The policy of the reservation of public works for periods of depression has been regarded with favour in most countries. In the United States, special attention was paid to it by the conference of experts convened by President Harding in September-October, 1921, for examining the means of solving the unemployment problem. A passage in the resolution adopted by them is sufficiently important to quote : " If all branches of our public works and the construction work of our public utilities—the railways, the telephone, etc.—could systematically put aside financial reserves to be provided in times of prosperity for the deliberate purpose of improvement and expansion in times of depression, we would not only greatly decrease the depth

of depressions, but we would at the same time diminish the height of booms. We would, in fact, abolish acute unemployment and wasteful extravagance." In certain countries steps on these lines have actually been taken by public authorities, and the universal extension of the system was recommended by the International Labour Conference at its first Session. That Conference urged all Member States of the Organisation to "co-ordinate the execution of all work undertaken under public authority, with a view to reserving such work, as far as practicable, for periods of unemployment and for districts most affected by it."

Mention should also be made of various measures which have been adopted, largely as temporary expedients, to maintain industrial activity in certain countries with a view to preventing or alleviating unemployment. Thus, in Switzerland, where the workers in the furniture industry were threatened with unemployment owing to the importation of furniture from neighbouring countries with a depreciated currency, a decree of the Federal Council of December 6, 1919, prohibited the import of furniture as from December 15. In Great Britain, a special import duty of 33½ per cent. was imposed, by the Safeguarding of Industries Act, on all imported motor-cars, watches and clocks, and musical instruments.

Side by side with the restriction of imports, special measures have been taken for the encouragement of export trade. This has been done in Belgium, Great Britain, the Netherlands, Switzerland, Poland, and the United States, among others. Much as these measures differ in detail, they agree in aiming at overcoming some of the post-war obstacles to international trade by facilitating long-term credit operations by providing exporters with guarantees. Of these schemes, the most comprehensive was the British system of export credits, established by the Overseas Trade (Credits and Insurance) Act, passed in 1920, and subsequently amended. By the provisions of this Act, the

Treasury was empowered to grant credits and provide securities for export transactions, other than the sale of munitions of war, conducted by the United Kingdom with all other countries. By a further Act, the Trade Facilities Act of 1921, the Treasury is empowered to guarantee certain loans contracted by private undertakings provided "the application of the loan in the manner proposed is calculated to promote employment in the United Kingdom."

All the "remedies for unemployment" which have so far been mentioned have actually been tried in one or more countries. But before passing from this part of our study, mention may be made of two "cures for unemployment" which exist so far only in theory, or at most, in experiment.

The first of these schemes is the "Homecroft Plan," advocated in the United States by Mr. Maxwell, in Great Britain by Dr. J. W. Scott, and in India by Captain Petavel. The central idea of this system is to encourage each worker to have a permanent refuge against the alternating ups and downs of the industrial system. It is argued that if he cultivates an allotment or garden in addition to his industrial work, he will be able to produce enough food to keep himself and his family from hunger. "The suggestion is, take advantage of the short industrial hours. Aim at two shifts a day for the man; one shift at his industrial work earning wages; and another, a shorter shift, a home-shift, in his garden producing food." This is not such a Utopian scheme as might at first sight be imagined. What can, in fact, be done towards making a third of an acre of ground return enough to supply a family, and for all the year round, with fruit, vegetables, eggs and pigeon, chicken and rabbit meat—and even with milk—for the table, has been described by Mr. W. E. Smythe, in his *City Homes on Country Lanes*.

From the standpoint of citizenship this scheme is of great interest. It would encourage the workman to take permanent root. Under the present industrial and social system, the average worker is employed on industrial work

from which he is liable to be "laid off," through no fault of his own, at a week's, a day's, or even an hour's notice. He lives with his family in a high tenement in a narrow street, in two or three rooms, for which he pays a weekly rent. His whole situation is a temporary and uncertain one. Under the Homecroft Plan, permanence would be substituted for temporariness and certainty for uncertainty. The worker would hold, under mortgage, his third of an acre of land and cottage on the outskirts of the city. There he and his family would be permanently rooted and his garden would fortify him against the sudden changes of industrial prosperity and depression. That such a change would promote good citizenship is not open to doubt. Long ago, it was observed that the married man is a better citizen than the celibate, because he has given hostages to fortune, and has a deeper sense of responsibility than the unmarried man. Other things being equal, the more intense and permanent are a man's relations with his family, his community, and his country, the better citizen he will be.

A plan of a somewhat similar kind, but with characteristic differences, has been suggested by Mr. Henry Ford. His idea is, in short, to dovetail industry with agriculture. "The farm has its dull season. That is the time for the farmer to come into the factory and help produce the things he needs to till the farm. The factory also has its dull season. That is the time for the workman to go out to the land to help produce food. Thus we might take the slack out of work, and restore the balance between the artificial and the natural." Ford has actually put his idea into practice, not only in his large 5000 acre farm at Dearborn, but at his little plants on the headwaters of the River Rouge.

The advantages of such an alternating system, from the standpoint of citizenship, are not far to seek.

In the first place, it would help to prevent unemployment, with all its physical, mental, and moral ill-effects. In the second place, it would help to give both factory workers and

agricultural workers a more balanced outlook. The diversification of work would prevent the crystallisation of attitude and temperament that is apt to be acquired both by the factory worker and by the farm worker. For prejudice and narrowness it would substitute fairness and breadth. Finally, it would contribute greatly to the health of the factory worker and would probably not seriously affect the health of the agriculturist. Every city worker who can goes to the country for a month or more a year. If this privilege could be obtained by *all* city workers by putting in a couple of months' work on a farm, the advantage to health would obviously be great.

These schemes have been mentioned, not because it is likely that either is susceptible of immediate application on an extended scale, but as an indication of possible progress in the not too remote future favourable to the development of the citizenship of the industrial worker.

Of a very different character is the second suggested "cure for unemployment." It is financial, and aims at doing away altogether with the alternating booms and slumps of the "trade cycle." There is a growing school of economists who have been examining the possibility of stabilising industrial activity and thus contributing to the prevention of cycles of unemployment, by the judicious regulation of the bank credits on which industry is so largely dependent.¹

Before the war, the index which was used as a guide to banking policy was the reserve situation, i.e. the proportion which the legal tender reserves of central banks bear to their deposit liabilities. The pre-war system is, however, no longer operative. What, then, should be the new indices to be used in the control of credit if the best interests of all engaged in industry are to be served? The economists to whom reference has been made urge that banking policy

¹ See J. R. Bellerby, *Control of Credit as a Remedy for Unemployment*; and *Monetary Stability*.

should now be directed towards regulating credit in accordance with the requirements of industry, as determined by the employment index and the movement of prices. If such principles were observed, there would seem reason to believe that by a policy first of stimulation, then, when the proper moment arrived, of stabilisation, industry might be maintained at a higher average level of activity than has ever previously been achieved. The realisation of such an ideal of industrial efficiency would entail, first, a high degree of national unity in following the new procedure, and, secondly, the development of international collaboration between the central banks of issue in the several countries.

It seems certain that only through co-ordinated financial measures of this kind can an effective endeavour be made to avert the waste due to unemployment resulting from trade cycles.

§ 11. Hours of Work.—From the standpoint of waste in industry, no question perhaps is of greater importance than hours of work. If the working-day is too long, output per day will fall, owing to the excessive fatigue of the workers. If the working-day is too short, output per day will also fall, owing to the fact that work cannot be speeded up beyond a certain limit. The problem of hours of labour, from the economic as well as from the social standpoint, consists in discovering what is the *optimum* duration of work.

At the present time, in most industrial States, the normal working week is one of 48 hours. In all of the following countries legislation is in existence providing for an 8-hour day: Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, Spain, Finland, France, Italy, Latvia, Lithuania, Luxemburg, Norway, the Netherlands, Poland, Portugal, Serb-Croat-Slovene Kingdom, Sweden, and Switzerland. In Great Britain and the United States of America, where general legislation on hours of labour does not exist, the majority of industrial workers enjoy a 48-hour week or less. The present position therefore is that there exists

practically no industrial country in which the 8-hour day has not been accepted as the common rule, although in some cases temporary prolongations have taken place.

If the social effects of the 8-hour day are indisputably good, can the same be said of its economic consequences? The economic question is a fundamental one, and many people are inclined to consider that it is inopportune to take account, at the present time at any rate, of what may be called its social by-products. They maintain that the claim for the limitation of the working day, whether on social or health grounds, must yield to the necessities of the economic situation. It is important, however, not to interpret the term "economic" in too narrow a sense. Even if all social and moral considerations are left out of account, the problem is to find, not the *maximum* number of hours' work of which the worker is capable, but the *optimum* number of hours that should be worked, i.e. the duration of work which produces the greatest output with the least possible expenditure in machinery, mechanical-power, man-power, and other factors.

Looking at the problem of hours from the economic standpoint, as thus defined, the question we must ask ourselves is: Does the 8-hour day involve economic waste? There are those who say that it does. Take, for instance, a statement of an employer. Referring to the reduction of working hours in Great Britain from approximately 53 to 47 he says: "It is very imperfectly understood what an enormous charge the decision made on the entire economic system. Assuming no change in intensity of effort, which, broadly, I believe to be the case, the effect is equal to a permanent strike of approximately $1\frac{1}{4}$ million of workers. Alternately, it can be regarded as having increased the cost of British products by over 200 million pounds."¹

But evidence of a very different sort has been supplied

¹ Letter to *The Times*, April 16, 1924.

by another British employer. Mr. L. T. Cadbury of Bourneville, examining the experience of his firm, employing about 10,000 people, in which between 1913 and 1923 hours of labour have been reduced from 47 per week to 44, states his conviction that the reduction in hours has been more than counterbalanced by (1) increased effort of the employees; (2) improved organisation and management; and (3) mechanical development.¹ Mr. Cadbury gives the following detailed figures to show the extent to which improvement has taken place in each of these factors:—

Operation	General Increase per Employee per hour, 1913 1923	Due to		
		1 Increased Effort	2 Improved Organisation	3 Mechanical Developments
Distribution by road transport . .	27	—	9	18
Cocoa process . .	47	15	12	20
Chocolate process . .	39	15	18	6
„ wrapping . .	27	10	12	5
„ (hand) . .	27	12	12	3
„ (machine) . .	15	5	5	5

If from the various statements of employers we turn to the investigations and enquiries of economists, we find that there is a general consensus of evidence that on the whole the 48-hour week is probably the *optimum* length of hours from the standpoint of industrial efficiency. The 48-hour week, according to the general view of the economists, gives for the majority of industrial operations maximum output with minimum accidents, lost time, and overhead charges. It would obviously be unscientific to pretend that the 48-hour week is the *optimum* for all kinds of industry. It is clear, for example, even from a superficial examination, that the *optimum* duration of work in mining is less than in the textile industry. *Optimum* hours of work

¹ Letter to *The Economist*, May 17, 1924

may even vary as between different factories in the same industry, or as between different workers in the same factory. For example, the *optimum* hours of work are less for a well-fed and physically fit worker than for an under-fed or unhealthy worker. Such industrial differences between individuals, between factories, and between industries render it very difficult to lay down a general norm.

Recent studies of the problem of *optimum* hours of labour have generally employed the method of the work curve. This method consists in recording the average output of each consecutive hour of a series of working days. If the hours of work are too long, the work curve in the graph in which the data are registered will fall towards the end of the working spell or the working day. On the other hand, where hours of work are shorter the output curves rise throughout the week. Mr. Thomas Bedford, as a result of work carried out by himself and his colleagues for the Industrial Fatigue Research Board, considers that it is possible to find conditions of work which will produce an ideal work curve. Such an ideal work curve has two characteristics ; it is very steady, and it rises rather than falls towards the end of the week. Such a curve would appear to indicate, in Mr. Bedford's opinion, that at the beginning of the day or week the operator starts work very nearly at a maximum rate and that as time goes on practice gradually increases his working capacity.¹

Some actual examples will illustrate the nature of the evidence that the work curve supplies on the *optimum* hours of labour. Dr. H. M. Vernon, studying during the war a large group of women turning aluminium fuse bodies on a capstan lathe, found that when their actual weekly hours of work fell from 66·2 to 54·8 their total daily output rose 11 per cent. ; and when their hours were further reduced from 54·8 to 45·6 per week, their total output fell by a mere

¹ Thomas Bedford, "The Ideal Work Curve," in the *Journal of Industrial Hygiene*, Vol. IV., No. 6, October, 1922, pp. 235-245.

2 per cent. In the case of forty women drilling a screw thread merely by inserting the fuses into revolving slots, output was increased 2 per cent. when actual hours worked fell from 64.9 per week to 54.8, and total output fell merely 3 per cent. when the hours worked were reduced from 54.8 to 48.1 per week.

The results of a more recent observation by Dr. H. M. Vernon and Mr. Bedford as to the effect of reducing hours on machine work in an English factory are quoted by Dr. P. Sargant Florence. The output of a group of eight experienced women engaged in "closing," i.e. in sewing together the uppers of boots and shoes by means of electrically-driven machines, was obtained for a 54-week period. In the first 26 weeks the hours of actual work averaged 49.7 per week. After the change speed of production rose rapidly, and in 18 weeks attained a steady level, which was 31 per cent. greater than before. The actual hours of work during the steady period averaged 46.2, so the total weekly production of the closers increased no less than 22 per cent.

In both these cases the types of operations observed belong to what has been called the "semi-automatic machine type" of work. In such work the worker's duties are confined to feeding or stocking the machine with material, or at the most to operating the machine to the extent of pulling levers to start and stop the action of the machine. In other types of work observations on the same lines have also been made both in England and America, and the results on the whole confirm the conclusion that the general *optimum* duration of working hours is 8 per day.¹

Here, again, the conclusions of an economist may be quoted :—

¹ Detailed evidence is given in P. Sargant Florence, *Economics of Fatigue and Unrest*, pp. 212-273 ; H. M. Vernon, *Industrial Fatigue and Efficiency*. See also *Industrial Fatigue Research Board Reports*, Nos. 1 and 23.

" (1) Owing to the uniform and repetitive nature of the work, operations of semi-automatic machines have presented the investigator with his chief opportunity of studying the exact effect on output of reducing the hours of work. It is from the observations on this type of work, therefore, that we must start out.

" (2) In semi-automatic work there have been direct observations of the effect of an actual working week of 45 or 48 hours. It was found that reduction of hours to this point did not necessarily imply any reduction of output. Total output was, practically speaking, maintained as compared with the output of a 55-hour week and very markedly increased when compared with the output of a 65- or 66-hour week.

" (3) Semi-automatic work is particularly unfavourable ground for a shortening of hours to effect variations in the rate of output. The facts are probably not unconnected with the frequent pauses that seem to occur here. . . . If on a 48-hour week output on semi-automatic machines is maintained, it will certainly be maintained on body work, hand work, and sense work. If output from semi-automatic machines is not typically sensitive to changes in hours, it is probably less rather than more sensitive than the general run of industrial operations." ¹

We have already seen that from the strictly scientific standpoint, the standpoint of the laboratory, the *optimum* number of hours of work may vary not only from industry to industry, but also from factory to factory and from individual to individual. But the general conditions of modern industry are such that it is impossible, unless in quite exceptional cases, to take account of such differences. Some general common rule must be found which suits not only the average type of operation but also the average

¹ P. Sargant Florence, *International Labour Review*, November, 1924, pp. 748-749.

type of worker. And the general conclusion which follows is that, on the ground both of practical industrial experience in all industrial countries and of special investigations under laboratory conditions, the arrangement of work which best satisfies the criterion of maximum output with maximum economy of effort and minimum waste due to accidents, sickness, lost time, and disproportionate overhead charges,¹ is the 8-hour day.

The importance of the 8-hour day, from the standpoint of citizenship, is that it leaves leisure for the things of the mind.² Freedom of spirit is at least as important as bodily

¹ It is economy in overhead charges that forms the economic basis of Lord Leverhulme's advocacy of a six-hour day. The solution of some of the problems of industry is found by Lord Leverhulme to lie in "working our machinery for more hours and our men and women for fewer hours. We must have a six-hour working day for men and women, and by means of six-hour shifts for men and women we must work our machinery twelve, eighteen, or twenty-four hours per day" (*The Six-hour Day*, p. 16). "We can get into a working day of six hours all the work we are capable of when that work is monotonous—attending machinery and general work in a factory. To get the work condensed into six hours would enable us to produce not only everything that we require, but to produce it without fatigue" (*ibid.*, pp. 17-18).

Lord Leverhulme proceeds to point out that the six-hour day could not be applied indiscriminately and immediately to all industries. It could only be applied in those industries in which it would, by its application, give lower costs of production by working machinery for longer hours and humanity, in two or more shifts, for fewer hours. In agriculture, for instance, the six-hour day is not applicable—at least, at present—because little labour-saving machinery is used in agriculture. According to Lord Leverhulme, the six-hour day is already applicable without loss to all those industries in which the cost of production in overhead charges is equal in amount to the cost of wages. "But in most workshops and factories the cost of production in the form of overhead charges is double or more the cost of wages." In all these the six-hour day could be profitably introduced.

² When the eight-hour day replaced the twelve-hour day in the works of the United States Steel Corporation in 1923, it was reported

liberty. Only with this spiritual freedom is it possible to see things steadily and to see them whole.

The attainment of this freedom of spirit is facilitated by securing that, as far as possible, operations that are merely mechanical should be performed by machines in relief of men. In this way the special capacities and powers of men will be set free for work which they, and they alone, can accomplish. In other words, the object of industrial progress is to make the workman of the future more of a director of instruments than a labourer.

§ 12. Organisation and Management.—From the standpoint of intense production, the 8-hour day can only give the best results for the community as a whole if it is accompanied by the best possible organisation of industry. Efforts to improve the technical organisation of industry have been made along three main lines, which are not always kept clearly distinct. The first of these is scientific management, the second factory organisation, and the third employment management. To a certain extent, the endeavours made along each of the lines coalesce and even overlap, but it is convenient to consider them separately.

The scientific management movement has as its main purpose the avoidance of avoidable industrial waste. The principles of scientific management, which in recent years has developed so remarkably not only in the United States but in the countries of the Old World, especially as exemplified in "time and motion study," are based on the conviction that there is one best way to do a thing, that that one best way can be discovered, and that it can readily be taught to people. It would be strange if it were otherwise.

It is indeed a paradox, as the British Health of Munition Workers Committee pointed out, that "though in the athletic world instructors exist to teach boxers how to
that "the credit balance of better citizenship far outweighs the debit balance of increased costs" (*Christian Science Monitor*, January 25, 1924).

balance themselves and use their arms, and cricket professionals are constantly at work improving the efficiency of batsmen and bowler, and coaches are a necessity to teach a boat's crew collectively and individually how and when to move their bodies and hands, yet in the industrial world the value of teaching operatives how to earn their livelihood is hardly yet recognised." ¹

From another standpoint, it may be said that scientific management seeks to apply to the workers the same principles as have proved successful in mechanical development. The ever-improving machinery which is used in industry does better work in a simpler way, and thus saves time, energy, and money. The same principle is, in scientific management, extended to the human factor.

The practical aim of the "scientific management engineer," to use the American term, is to avoid wasting the time and energy of the worker by eliminating all unnecessary movements or by substituting easier, more systematic and more rapid movements for comparatively inefficient ones. All manual work consists of a series of movements. If the number of movements made in the performance of a given job-unit can be reduced, without rendering the remaining movements more difficult, fatiguing and time-consuming, and if for inefficient movements efficient ones can be substituted, it would appear *prima facie* that the net result would be to the advantage not only of the individual worker and the individual employer but of the community as a whole.

The classical example of the possibility of reducing the number of movements in an industrial operation is provided by Mr. F. B. Gilbreth's experiments in bricklaying. He found that in the methods of bricklaying, as ordinarily practised, no fewer than eighteen distinct movements were involved. Many of these movements were obviously unnecessary, and could easily be eliminated. The pile of

¹ Health of Munition Workers Committee, *Interim Report*, p. 77.

bricks from which the worker took the brick to be laid was at such a distance that he had to take a step to reach it, and then a step back in order to lay the brick in place. Further, the pile was on a low level, so that the bricklayer had to bend down to pick up each brick. Both these movements were eliminated by the use of the Gilbreth scaffold. This scaffold is adjustable, and the unfinished brickwork can therefore be kept constant in height relatively to the bricklayer. Further, by a simple system of adjustment, the loose bricks, the mortar-box, the bricklayer himself and the wall are kept in such a convenient relation that there is no need for the bricklayer to do more than move his arms and hands and the parts of his body involved in their use. As a result of the application of these methods in the elimination of unnecessary movements, it was found possible by Gilbreth to reduce the number of necessary movements in the laying of each brick from 18 to 5, with the result that the bricklayer was able to lay 350 bricks per hour, compared with 120 by the old method.

It would take us too far from the main purpose of our study to examine in detail the technical developments of the system of motion study initiated by Gilbreth. It will be sufficient to say that, as a result of steady technical progress, it is now possible by means of the *stereochronocyclegraph* for the investigator to record and to reconstruct in three dimensions industrial movements in such a way that the timing of each part of the movement is accurately known.¹ The investigator then constructs, on the basis of this stereographic view, a wire model. Working with this model, he determines where and how it is practicable to introduce modifications to shorten the path of movement.

The results of motion study are in many cases striking. An illustration may be given. An operation in moulding

¹ A good account of the technical methods employed in motion study is contained in C. S. Myers, *Mind and Work*, p. 3; and F. Watts, *An Introduction to the Psychological Problems of Industry*, p. 61.

took 53 minutes. An investigator said that, if the workers were trained in improved methods, it should be done in 44 minutes. Actually, after the workmen had become expert through practice, it was done in 20 minutes. That is, there was an increase of 165 per cent. in the rate of output, the labour cost was reduced by 54 per cent., while the earnings were increased by 60 per cent.¹

The reforms introduced as a result of motion study are, however, only one part of scientific management. The central conception involved is the handing over of all planning and routing of work to trained experts, and explaining to the workmen in elaborate detail what they have to do. "The work of every workman is fully planned out by the management at least one day in advance, and each man receives, in most cases, complete written instructions describing in detail the task which he is to accomplish, as well as the means to be used in doing the work. And the work planned in advance in this way constitutes a task which is to be solved, as explained above, not by the workman alone, but in almost all cases by the joint effort of the workman and the management. This task specifies not only what is to be done, but how it is to be done and the exact time allowed for doing it."²

Now what is the bearing of scientific management on the development of citizenship? Does it seem likely to lead to an increase in the sum of human welfare?

From this standpoint, doubts of the value of scientific management have been expressed by Dr. A. C. Pigou: "There is danger," he says, "that this method of industrial organisation may be carried further and applied more widely than the interest of the national dividend—not to speak of the more general interest of society—when viewed as a whole, demands."³ The grounds on which Dr. Pigou bases

¹ C. S. Myers, *Mind and Work*, p. 13.

² F. W. Taylor, *The Principles of Scientific Management*, p. 39.

³ A. C. Pigou, *The Economics of Welfare*, p. 188.

his view are, in the main, the probable disappearance of suggestions for improvements from workpeople and the probable injury to the general initiative and independent activity of workmen owing to their complete subordination to the detailed control of functional processes.¹

For the same reasons even more severe criticisms of scientific management have been voiced. Mr. A. J. Penty, for instance, writes: "The division of labour and its recent development into scientific management are the curses of industrial civilisation, for by reducing men to the level of automatons, they reduce them to the position of mere fragments of men; they undermine their spiritual, moral, and physical life, and disintegrate all their personality."²

Hardly less severe is the criticism of Mr. A. E. Zimmern: "If you read Mr. Taylor's book," he says, "you will find that what he means . . . is that the management is to do all the thinking and the workmen all the toiling, that the scientific manager is to use his head and the workmen merely their arms and legs. This is autocratic rule with a vengeance, it takes one back to the days of slavery and of the Pyramids."³

It may at once be agreed that there is a danger in over-emphasising the standard nature of industrial movements. The mental and physical characteristics of individuals are not exactly the same in all respects, and it would do as much

¹ "Scientific management" is sometimes opposed by organised labour, mainly on the grounds that piece-work rates of pay will be subsequently "cut," and the employees will be discharged as a result of speeding up production. It would take us too far afield to discuss the merits of the question. The standpoint of American labour has been explained by Professor R. F. Hoxie, in his *Scientific Management and Labour*. "In general (in England) the trades unions have raised no opposition to motion study so long as the workers have been satisfied in the particular factory in which it has been introduced" (C. S. Myers, *Mind and Work*, p. 182).

² A. J. Penty, *Post-Industrialism*, pp. 58-59.

³ A. E. Zimmern, *Nationality and Government*, p. 264.

harm as good to compel all individuals to adapt themselves to a single standard method. On the other hand, not much weight is attached to this argument in the realm of sport. The boy who is taught rowing at Eton and Magdalen is urged to conform to a single standard method, and his individual initiative is not considered to be impaired by the severe discipline involved in a uniform grounding. None the less it is psychologically certain that no one method or style is the absolute best for *all* persons, and there is a wide field for psychological research to determine the relation between individual physical and mental differences and the specific methods needed to suit these differences.

It can never be forgotten that in all industrial processes, just as in all movements in sport, *some* system of movements will become habitual. Under the present haphazard methods of industrial training inefficient systems of movement often become habitual, when it would have been possible by judicious training to secure that efficient systems became standardised and habitual. The training of a worker in efficient methods merely shows him the most economical methods of work and prevents his forming bad industrial habits. Scientific management need not turn a man into a machine any more than if he were left completely to his own devices. His powers and capacities as a citizen are not impaired.

Most of the criticisms of scientific management assume, as Mr. Zimmern's does, that scientific management aims at being a system of government in industry. If this were true, these criticisms would be justified. But, in fact, scientific management has nothing whatever to do with the control of industry. It can be applied equally well under all forms of industrial control. It has been introduced in trade union works in England, in paternalistic shops in America, and in Communist factories in Russia. As a method of securing economy of effort in performing the various movements involved in industrial processes, it has

nothing to do with the management or government of industry.

"Scientific Management," then, is not "management" at all, and often it is not "scientific" either. Its conclusions are often based on inadequate study. It is true that Dr. Taylor claims that "scientific management guards the workers against over-speeding and exhaustion nervously and physically," but this claim is not always borne out by the facts. A real danger of improper speeding up is involved in some of the methods of scientific management. This is due to the frequently-adopted system of basing the task for a group of workers on the fastest records of the fastest man under the most propitious circumstances.

It is true that in all cases, in order to allow for human frailty and imperfection, a delay allowance is introduced. In practice, however, it would appear that this is often insufficient to avert overstrain. Dr. Sargent Florence on the basis of the results of a very large series of observations, considers that the amount of the allowance is often quite inadequate.¹ If this be so, and overstrain results from undue speeding-up, then no increase in wages will compensate, from the standpoint of citizenship, for the resultant impairment of health and strength.

Closely allied with scientific management are the movements in favour of improved factory organisation on the one hand, and of improved staff or personnel organisation on the other.

The avowed aim of improved factory organisation is the elimination of material waste. The keen competition of modern industry is forcing employers in all industrial countries to reduce material waste to a minimum. From almost all countries striking instances could be quoted of the success that has attended these efforts. To illustrate the movement one example only will be selected—the Detroit works of Henry Ford. Other examples equally

¹ *Economics of Fatigue and Unrest*, p. 94.

impressive might have been selected, but for our purpose the Ford instance is convenient, because it has been clearly described by Ford himself, and because his astonishing success is universally recognised.

Take first the actual placing of the machinery in the factory. Mr. Ford says: "Our machines are placed very close together—every foot of floor space in the factory carries, of course, the same overhead charge. . . . We measure on each job the exact amount of room that a man needs; he must not be cramped—that would be waste. But if he and his machine occupy more space than is required, that also is waste. This brings our machines closer together than in probably any other factory in the world. They are scientifically arranged, not only in the sequence of operations, but to give every man and every machine every square inch that he requires and, if possible, not a spare inch, and certainly not a spare foot, more than he requires."¹

Waste may be eliminated not only in the planning of the factory, but more particularly in the planning of the work. Perhaps the most notable instance in the world of the planning of work to eliminate waste of effort and time, and therefore of expense, is the assembling of the Ford car. The Ford car is stated by Mr. Ford to contain about 5000 parts, and, as is well known, the complete assembling of these parts is done in a connected series of consecutive operations in an incredibly short space of time. Ford explains clearly the principles which guide this elimination of waste: "The first step forward in assembling came when we began taking the work to the men instead of the men to the work. We now have two general principles in all operations—that a man shall never have to take more than one step, if possibly it can be avoided, and that no man need ever stoop over. ('The policy of "man-high" work—one line 26½ inches and another 24½ inches from the floor to suit speeds of different heights.')

¹ Ford, *My Life and Work*, p. 113.

" The principles of assembling are three :—

" (1) Place the tools and the men in the sequence of the operation, so that each component part shall travel the least possible distance while in the process of finishing.

" (2) Use work slides or some other form of carrier, so that when a workman completes his operation he drops the part always in the same place—which place must always be the most convenient place for his hand—and if possible have gravity carry the part to the next workman for his operation.

" (3) Use sliding assembling lines by which the parts to be assembled are delivered at convenient distances.

" The net result of the application of these principles is the reduction of the necessity for thought on the part of the worker and the reduction of his movements to a minimum. He does as nearly as possible only one thing with only one movement." ¹

Ford gives many striking examples of the waste eliminated by this method. One of the most impressive, because one of the simplest, is the following : Under the original system of piston-rod assembling, the operation was entirely conducted by one man, and each assembly took about 3 minutes. By splitting up the operation into parts and arranging a work-slide, the time taken was so cut down that whereas 28 men used to perform 175 assemblies per day of 8 hours, under the new system 7 men performed 2600 assemblies per day of 8 hours. Again : " There used to be 17 men taking the burrs off gears, and it was a hard, nasty job. A man roughly sketched a special machine. His idea was worked out and the machine built. Now 4 men have several times the output of the 17 men, and have no hard work at all to do." ²

In smaller ways waste can also be avoided. To quote Ford again : " The sweepings net 600,000 dollars a year. Experiments are constantly going on in the utilisation of scrap. In one of the stamping operations 6-inch circles of

¹ Ford, *My Life and Work*, p. 80.

² *Ibid.*, p. 101.

sheet-metal are cut out. These formerly went into scrap. The waste worried the men. They worked to find uses for the discs. They found that the plates were just the right size and shape to stamp into radiator caps." ¹

These instances of the elimination of waste by attention to details of factory planning, arrangement of machinery, simplification of processes, and utilisation of scrap, could be paralleled from the annals of successful manufacturers in all countries of the world. If all factories were as efficiently organised as the best, a real improvement in the standard of living of the average citizen would be definitely assured.

Equally important, in the interests of the individual citizen and the community as a whole, is the improvement of the personnel organisation of the average factory. In America a determined effort in this direction has been made by the study of "employment management." The employment manager replaces the foreman as the "hiring and firing" agent, and the functions of the foreman are reduced to the direction of the working force under him. The aim of the system of employment management is to place questions of the engagement, assignment to work, and discharge of men, in the hands of men whose personal qualities and training fit them for their highly delicate and responsible functions, and whose position in the firm removes them from any risk of being influenced in their actions by unworthy motives.

The first function of the employment manager is, therefore, to engage men, and to see that they are assigned to the work which suits them best. The exercise of this function is undoubtedly more difficult under the conditions of American industry than in a country like Great Britain. In British industry there is still, in general, a sharp distinction between "skilled" and "unskilled" work, and the jobs in the shops and the craftsmen who can do these jobs are definitely standardised. Under conditions such as these when men

¹ Ford, *My Life and Work*, p. 249.

are wanted they are usually wanted for definitely standardised jobs, and the employment exchange or trade union is asked to supply craftsmen skilled in these jobs. On the other hand, for unskilled work a "labourer" is required, and nothing else. In the United States, on the other hand, the sharp distinction between the "skilled" and the "unskilled" has not yet been crystallised, or even in certain cases there is a tendency to obliterate it when it has been created. In "open shops," where trade union restrictions are not observed, the distinction between "skilled" and "unskilled" largely disappears. Where automatic machines are largely used, a certain skill is certainly required, but it is a skill which can be acquired fairly rapidly.

The capacity of a worker to perform work of this sort often depends to some extent on his natural capacities. Now it is the work of the employment manager to engage men who seem *prima facie* to possess the necessary qualities, to test them, and to assign them to exactly the job on which they will work most efficiently. These tests may be psychological or practical, or both. The man may be subjected to definite psychological tests to ascertain his fitness before being engaged, or he may first be engaged and then given a practical trial on the job on which it is intended that he should work. In both cases a considerable amount of wise supervision is necessary.

The second main function of the employment manager is to prevent disputes occurring within the factory, and to settle those that do arise. The employment manager, therefore, definitely tries to win the loyalty of the workman to the firm. A well-known American employment manager writes of the results of employment management in a New England mill: "We have succeeded in getting every man in the organisation trying to produce the largest quantity of the best quality pulp at the lowest cost. It is not because the department heads, superintendents, or myself are making superhuman efforts to produce the results, but

because we have succeeded in getting everyone to co-operate with us.”¹

In seeking to produce this spirit of loyalty on the part of the workpeople, the employment manager may adopt three different methods. In the first place, he may attempt to secure material advantages for the workers. Holding a position of some influence in the firm he may be able, by arguing that it will result in better work and greater output, to secure for the workers better wages, bonus distributions or other concessions. In the second place, he may improve conditions in the factory by the promotion of various welfare schemes. Such schemes do not add directly to the actual earnings of the workpeople, but by making the conditions of work more healthy, comfortable, and pleasant, they may contribute in a high degree to the encouragement of a spirit of loyalty among the workers in the firm. Finally, the employment manager may seek to develop this spirit of loyalty by means of a series of more adventitious expedients. Much ingenuity has been exercised, especially in America, in devising these measures, which appeal in general to sentiment. Some managers enclose “pay envelope stories” in the pay envelopes of their employees. These leaflets contain anecdotes of a propaganda kind intended to stir the sentiments of the workpeople in a way favourable to the employer.² In other cases the employment manager, himself a distinguished athlete, organises sports clubs for the workers, and thus gains the personal loyalty which is transferred, as it were at second hand, to the firm.

The third and last of the chief functions of the employment manager is discharge. Such discharge may take place either as a result of seasonal or cyclical depressions in trade, or in consequence of some special incompetence or breach of

¹ R. B. Wolf, “Individuality in Industry,” *Proceedings of Employment Managers' Conference*, 1917, p. 201.

² One firm in the United States specialises in the production of these “stories.”

discipline on the part of the individual employee. The aim of employment management is to see that the claims of justice, individual or social, are not overlooked in the process of "firing." "An event such as the separation of a man from his livelihood ought to be a solemn thing." Therefore it is important that no man should be discharged as a result of arbitrary or passionate decisions. If a man is dismissed for incompetence or indiscipline, it must be recognised by his co-workers, if not by himself, that he deserves to be dismissed. In the case of collective "lay-offs" due to a slump in trade, employment management seeks to operate such discharges in the way least likely to injure the workers and their families. Some notice of discharge is given; workers are not laid off at an hour's notice. The first to go are the less competent workers and those who have no family responsibilities. In this way an attempt is made to do justice to the claims of citizenship and social justice.

§ 13. Industrial Relations.—We have now examined in detail various features of the system of production; we have analysed the waste that exists at every stage, and we have drawn attention to methods by which, in accordance with the principles of citizenship, this waste may be eliminated or reduced.

No feature of the intensive study devoted in the last two or three years to the problem of securing more efficient production and at the same time raising the general standard of life of the community is more remarkable than the growing conviction of the need for better relations between the various groups engaged in industry.

From the standpoint of citizenship the question is of quite peculiar interest. It will clearly make a real difference from the social standpoint if the citizen can know and feel that in production he is not merely a means to an end, not merely a cog in the industrial machine, but that he also has certain rights to discuss, and certain powers to determine, the orientation of his work.

It has been the custom to consider questions of industrial relations in connection with the conflict between capitalism and socialism. A careful examination of the anatomy of industry would appear to show that this is a mistaken avenue of approach. Industry is a very Briareus. Its forms are many, its processes are diverse, and it would indeed be strange if it should prove that a single form of control were in all cases alike the best. But the argument against the thesis that a single form of control in industry is in all cases best is not confined to this *a priori* consideration. Industrial experience, such as it is worth, has shown that the same form of control has not in all cases proved best adapted to ensure the development of industry and the service of the public.

Perhaps the most striking feature of the industrial system as we know it is that it is not a system at all, and that it is not governed at all. "The normal economic system works itself. For its current operation it is under no central control; it heeds no central survey. Over the whole range of human activity and human need, supply is adjusted to demand, and production to consumption, by a process that is automatic, elastic, and responsive. . . . This intricate system has been built and is maintained by the work of thousands of men, of keen but limited vision, each working within his own special sphere, each normally seeing and knowing only his own and the immediately adjacent territory. Since the rude shock of war broke this machine the world has been looking for the supermen who made it and controlled it, for those who understood it both in its basic principles and its infinite detail, and could, therefore, refashion and remodel it to the new conditions. It has not found them. They do not exist."¹

This system, or lack of system, has its advantages. "It is the distinctive feature and signal merit of that system that under it the multitudinous economic activities of the

¹ Sir J. A. Salter, *Allied Shipping Control*, pp. 16-17.

world are, so to speak, democratised. They govern themselves with all the liberty and elasticity and variety of freedom.”¹ Goods are produced in ever-increasing quantities, and they are distributed to the ends of the earth.

But the results of the operation of the system are by no means perfect. Demand and supply are its twin supports, but like the images of Nebuchadnezzar’s dream, their feet are of clay. The Demand of the orphan child for food, which cannot make itself effective in terms of cash, remains unsatisfied, and the Demand of the luxurious lady for clothes, backed by ability to pay, finds Supply in abundance. Or again, at fairly frequent intervals, Supply is in hopeless excess over Demand, and the whole paraphernalia of industry, workers and machines alike, are forced to mark time until the community has recovered from its fit of indigestion.

Such chaotic results of the existing lack of system have suggested that some general system of government is necessary. Now government may be concentrated either in the hands of the consumers, or in the hands of the producers. If it is in the hands of the consumers, it may constitute a system of State Socialism or a system of Communism, and if it is in the hands of the producers, it may be a system of Syndicalism or a system of Guild Socialism.

From the standpoint of the citizen as producer, what are the characteristic features of these systems of government ?

State Socialism.—State Socialism involves the ownership and management of business by the State as a whole or by public associations within the State, such as counties and municipalities. In practically all States there are examples of industries owned and managed on this basis. All States own and operate their own postal systems, and many of them the whole or part of their railway and telephone systems. In many countries certain public utility services, such as the supply of water, gas and electricity, are operated by the municipalities. All such businesses have two common

¹ Sir J. A. Salter, *Allied Shipping Control*, pp. 16-17.

characteristics: In the first place, they are definitely "services," and services which every consumer requires. In the second place, they can be supplied most economically if they constitute a monopoly. In view of the universal demand for them and the social dangers of entrusting the monopoly of their supply to private companies, there is a wide recognition that they form a suitable field for the operation of the principles of State Socialism.

From the standpoint of the citizen who is employed in these businesses owned and operated by the State or its subdivisions, they differ hardly, if at all, from ordinary private industrial enterprises. Owing to the fact that the services which they provide are constantly required, they do not suffer from alternating slumps and booms, and consequently employment is more regular than in private industry. But hours of labour, rates of wages and other conditions are, in general, the same as in ordinary industry, and the individual worker has, in general, no more say in the government of a State-owned or State-operated enterprise than in any other.

Communism.—The Communistic system carries a stage further the system of State Socialism. In a pure system of Communism all the means of production would be owned by the community, and all production would be carried on for the benefit of the community as a whole. The goods produced would be divided among the community in accordance with their real needs, and not in accordance with the demand which they could make effective by money. All goods would be produced by the workers freely without pay for the community, and the workers would have the right to draw freely without price on the community for the goods they required. Both on a small and on a large scale efforts have been made to put this system into operation. Robert Owen organised small Communistic societies in England and in America at the beginning of the nineteenth century, and a hundred years later the Communist Government of Russia

sought to introduce it on a nation-wide scale. But in neither case did the vision outlast for long the harsh contact with reality. Robert Owen's Communists disintegrated, and the Russian system soon lost its "orthodox" Communistic character.

And from the standpoint of the individual producer, Communism is no more satisfactory than State Socialism. Under the Communistic system industry still employs its technical officials and its foremen. The individual citizen does not share in the government of the industry any more than he does under the system of individual enterprise. He works under conditions of regimentation and discipline.¹

Neither of these systems satisfies the citizen as producer, because what he claims is some real part in the control of production. "As a producer," he says, "I demand an adequate share in the control of the work in which I am engaged, just as I have a vote in the government of my country and a voice in the management of my town." In the attempt to satisfy this claim Syndicalism and Guild Socialism have been devised.

Syndicalism.—Syndicalism, in the form in which the theory originally took shape in France, means the ownership and control of each industry by the workers in it. The mines, according to this theory, ought to belong to the miners, and production in the mining industry be controlled

¹ It is true that Russian Bolshevnik poets conceive this regimentation as true freedom. Thus A. Gastev, quoted in *New Europe*, November, 1919, p. 113, says:—

"When the morning sirens sound . . . it is not a call to subjection. . . . The sirens sound at eight o'clock for a whole million. A whole million take up the hammer in one and the same instant.

"Of what sing the sirens?

"It is the morning hymn of unity."

But to the individual Russian worker such aspiration is meaningless. Discipline is the same under the Bolshevnik as under the Czarist regime.

by them. Further, each individual mine should be owned or controlled by the individual workers employed in it. These workers would determine their own conditions of work and would be wholly responsible for the control of the processes of production. To complete the theory and redress the balance in favour of the consumer, it was provided that the local *Bourse du Travail*, corresponding roughly to the Local Trades Council, should exercise a sort of general central control over the operations of the producers in the various industries.

In a pure form, Syndicalism has never been put into practice. It is true that in Russia, in the early days of the Revolution, factory soviets were established, but any real control that they possessed rapidly disappeared. In Italy the workers in the metal works of the North seized the factories in the autumn of 1920, and for a week or two attempted to run them. Soon, however, they were forced to call to their assistance the technical officials and, a little later, the directing and managerial staff, and the old order was rapidly re-established.

From the standpoint of the citizen as producer, Syndicalism would certainly satisfy the demand for control. Unfortunately, by overlooking or minimising the importance of the part played in production by factors other than the worker, it almost necessarily leaves the worker nothing to control. It is one-sided in its ideas. It does not provide for joint-control, and it is not a system of self-government in industry, for the capitalist and the technician are not to share in control; it is the dictatorship of the worker.

Guild Socialism.—Guild Socialism attempts, while giving control to the producer, to avoid the main defects of Syndicalism by recognising the claims of the intellectual worker, and by emphasising that the purpose of industrial production is the service of the consumer. "Control of industry means control by *all* the workers, manual and brain workers alike. It means that all persons placed in a position of authority

must be responsible, at some stage or other, to those whom they govern. It must be based on strong local groups, with definite parts to play in the whole. The whole business of producing the goods which are wanted must be entrusted to the workers entirely, but not the fixing of prices nor the question of capital, which must be decided by the whole community jointly.”¹

The principles of Guild Socialism have been put into practice on a small scale in the building guilds organised in 1920. The National Building Guild, established as a result of the efforts of building operatives in London and Manchester, comprised Regional Councils, elected partly by the craft organisations of the region, including professional organisations of architects, engineers, and clerks, and partly by the local guild committees. These local committees were elected by the building trade unions in each area, and were responsible for the supply of labour on building contracts in that area. The important questions of management, capital, and profit, were regulated as follows: Each regional council appointed a manager and headquarters staff, while the foreman on each job was appointed by the local committee, and thus was not directly responsible to the particular workmen to whom he gave orders. Capital (little is required in the building industry) was borrowed at fixed rates of interest, and full trade union rates of wages were paid during the period of the contract, in good weather or in bad. Profits, or rather the surplus remaining over after paying wages, interest on capital, overhead expenses, etc., was to be used for various kinds of improvement or development. At first the experiment worked well, but after a comparatively short period the enterprise ceased to exist. The main reason for the failure would appear to lie in difficulties of control.

The individual workers in an industry, according to Guild Socialism, are to control production in that industry.

¹ Margaret I. Cole, *The Control of Industry*, pp. 8-9.

But this does not mean, the Guild Socialists proclaim, that the managers and foremen in a particular factory will be directly controlled by the workers under their orders. But they will have to "pass the test of the workers under them." If a manager cannot pass this test, "he will have to go, though the body which actually dismisses him will probably be an Appeal Court or some industrial authority other than his immediate subordinates."¹ Now, it is sufficiently evident in theory, and it became still more evident in practice, that a system of self-government of this kind involves all sorts of difficulties. Instead of leading to harmonious working, the actual result is the very opposite. The workers, if they really control, make the manager's position impossible, and if they do not control, the virtue of the system evaporates. In practice, the guild undertakings appear to have oscillated in a state of unstable equilibrium between no workers' control and too much workers' control.

There is a growing conviction that the best way to improve industrial relations is to leave aside the consideration of theoretic panaceas, to take things as they are, and to try to work out an empirical philosophy to fit the facts of the case. Actual practice, in the matter of industrial relations, has always departed in greater or less degree from the theory on which it was supposed to be based.

"Laissez-faire," for example, in its pure form, implies that industrial relations take care of themselves through the exercise of individual freedom of contract in the competitive labour market; but gradually and almost imperceptibly practice has involved the deliberate organisation of the relations between employers and employed. Communism embodies a theory of industrial relations, but Communism in Russia was soon radically affected by the New Economic Policy, and the practice of industrial relations underwent a marked change. In certain countries where

¹ *Op. cit.*, pp. 7-8.

the philosophy of the class struggle is still the official philosophy of the trade unions, industrial relations in the form of collaboration between employers and workers do, in fact, exist.

What are the actual facts of the conduct of industry in Great Britain and the United States? Who are those who are engaged in the process of production? That is the first question to settle. There are three classes of persons: (1) the workers, manual or intellectual; (2) the organising and directing staff; and (3) the capitalists. Efforts have, indeed, been made to prove that industrial production could be carried on without the assistance of one or other of these factors. Russian Communism in its early stages tried to do without both the organisers and the capitalists. But it soon began to call in the organisers, and it soon made overtures to foreign capital. Without further argument, though long argument is possible, let us assume the validity of this tripartite classification of the agents of production.

Each of these classes undoubtedly exercises, at present, some form of control. Take a large enterprise like a railway company. What sort of control is exercised by capital? The shareholders of the company may number over 200,000, each holding a relatively small amount of capital in the company. The shareholders' meeting is attended, perhaps, by a few hundreds of the shareholders. The shareholders, it is true, appoint the directors, but it is impossible for them to exercise any direct control over their work, and it is often impossible to exercise any control even over general policy. Cases are not lacking where disputes between shareholders and directors have come before the courts for settlement. The control of the shareholders is, in general, negative rather than positive. If they are not content with the way in which the company is managed, they may withdraw their capital.

And what sort of control is exercised by labour? The workers exercise no direct influence on the directors, and

the directors are not in any way responsible to them. But in practice, by the powers they possess to discuss wages and conditions of labour, by their right to withdraw their labour by striking (just as the shareholder may withdraw his capital), labour exercises an indirect influence on the conduct of the undertaking, frequently not less important than the influence of the shareholder.

The greatest degree of control, it results, is exercised neither by labour nor by capital, but by the directors and managers. These, as the servants of the shareholders, tend to consider their interests rather than those of the workers, but experience shows that this is not always the case. The directorial and managerial interest is an independent one.

In the modern world of industry we thus find three sectional communities, the community of capital, the community of labour, and the community of the organiser, each possessing sufficient corporate intelligence and material resources to be conscious of its power. Each of these sectional communities, as we have seen, does exercise its power. Unfortunately, this power is often exercised only in a negative and obstructive way. Each sectional community, instead of working in the interests of the whole, often works for its own hand against the interests of the whole. The sectional community may call so loudly on the loyalty of its members that the silent claims of the community as a whole go unregarded.

Citizenship requires that all persons engaged in industrial production, whether as capitalists, directors, or workers, should have some share in the determination of industrial conditions. Citizenship involves a status, and not merely a function. The citizen as producer has a status, whether his function be that of provider of capital, provider of labour, or provider of organising ability. But the share in the determination of conditions in industry that falls to each category naturally differs according to its function.

It is a striking historical conjuncture that the three

greatest industrial countries of the world are all at present exploring, in a spirit of industrial citizenship, the possibilities of securing a permanent improvement in the relations between the various parties engaged in industry. There is a frank acceptance, in the United States, in Great Britain, and in Germany, among large and influential circles of employers and workers, of the view that improvements in industrial relations are both possible and desirable, desirable not in the interests solely of one or other of the sectional communities of which we have spoken, but of the community as a whole.

In America large groups of employers, tired of the negative "open shop" struggles with the trade unions, have launched out on positive attempts to secure the co-operation of the workers. Sometimes this movement is directed against trade unionism, but in perhaps a majority of cases the employers are not hostile to the unions, and the new policy of industrial relations is being carried forward in agreement and collaboration with the unions.

"The movement for improved Industrial Relations," writes an outstanding American specialist on industrial relations, Mr. R. M. Olzendam, "has for its object the building up of a spirit of collaboration between the men and the management of an individual factory, of national industry, of the industrial world at large. Any steps taken to aid in breaking down fear and suspicion, and in building up conditions which justify confidence between men and management in industry fall under the heading of Industrial Relations. Once confidence is established, it expresses itself in collaboration, which, properly directed, means lower costs, better quality, greater production, and more satisfaction in work. This, in turn, means the creation of greater wealth to be more widely divided among the people who have helped to create it."

In Great Britain a new interest is being taken both by employers and workers in the prospects of closer co-operation.

There is already a tradition of industrial co-operation in Britain. In some industries permanent machinery for the examination of questions of common interest has existed for thirty years, and the Joint Industrial Council movement has done something, though much less than its promoters hoped, to ensure regular round-table discussion between responsible representatives of employers and workers. The general strike of 1926 showed, however, that all was not well, and since then reflection among employers, directors, and workers, has been leading to the conviction that the time is ripe, and more than ripe, for a determined effort to secure better industrial relations. The positive initiative in this direction taken by Sir Alfred Mond and other representative employers, and the welcome given to it by the General Council of the Trades Union Congress led, at the beginning of 1928, to a joint examination of the situation that cannot but contribute to the progress of British industry and all engaged in it.

The problem of industrial relations is being approached in other countries by other though similar methods, such as the works councils in Germany, Austria, Czechoslovakia, and Norway, the national economic council in France, and the law of corporations in Italy. All these movements seem to indicate that a change is gradually being introduced in the relationship between employers and workers, and that the necessity is being recognised of associating the latter as responsible partners in industry through some form of representative organisation. It can hardly be said that any of the forms of organisation at present attempted have passed out of the experimental stage, but the movement is of sufficient significance to require the closest attention and to make it desirable that the success or failure of the various experiments now in progress should be carefully watched. Industrial relations are not likely to remain stationary, but are subject to the law of progress or regress which governs most human institutions.

There is apparent in all this movement a recognition of the need of all those engaged in industry, whether as capitalists, directors, or workers, to express themselves as citizens in their work, by participating in some way in the determination of conditions in the industries from which they gain their livelihood and through which they serve the community.

CHAPTER IV.

THE CITIZEN AS CONSUMER.

§ 1. **The Problem of Consumption.**—It has often been pointed out that economists have neglected the study of consumption. In some ways consumption is more difficult to subject to economic analysis than production. And it was, in fact, a moral purpose, as Marshall showed, that was responsible, in part at least, for directing attention to the economics of consumption. "The spirit of the age," Marshall wrote in 1890—and it is even more true now than when he wrote it—"induces a closer attention to the question whether our increasing wealth may not be made to go further than it does in promoting the general well-being; and this again compels us to examine how far the exchange value of any element of wealth, whether in collective or individual use, represents accurately the addition which it makes to happiness and well-being."¹

When man reaches the stage of self-conscious citizenship, his wants and desires are insatiable. The wants of the savage are few and they are soon satisfied. His wants for food are satisfied by an orgy of gorging, his wants for house-room are satisfied by a mud or wattle hut. As men rise in the level of civilisation, however, their rudimentary wants develop. The citizen of a civilised community does not want to consume a greater quantity of food than the savage,

¹ *Principles of Economics*, p. 85. Thirty years before this (1860) Ruskin wrote in *Unto this Last*: "Consumption . . . is the end, crown and perfection of production; and wise consumption is a far more difficult art than wise production" (p. 101).

but he wants both quality and great variety, and above all he wants to satisfy the social claims of hospitality. In the same way the desire for house-room grows. The citizen of a civilised community wants adequate house-room, not only for himself and his family, but also to facilitate the exercise of social activities in his community. In both cases the rudimentary wants are "sublimated" in social wants which greatly stimulate social consumption. The more civilisation develops, the more social consumption extends.

Before proceeding to examine in detail the social characteristics of consumption, a word must be said on the relation of the citizen as consumer to the citizen as producer.

§ 2. **Producer and Consumer.**—The purpose of industrial production in the last resort is, no doubt, the service of the community of consumers. If we trace the main outlines of the gradual evolution of the relations of producers and consumers, this will be sufficiently clear. In the most rudimentary beginnings of society, the individual produces directly what is needed for his own consumption. He catches fish or wild animals or gathers wild fruit only to serve the needs of his own consumption and those of his family. At this early stage it is obvious that production is in the service of consumption. At a later stage of evolution, that of domestic industry, the shoemaker and the weaver and the potter produce their wares to meet the individual needs of particular consumers, known to them, and for whose service they directly work. They make a living out of this productive service, it is true, but the social *raison d'être* of their work is to serve the consumer. In the modern industrial order these relations have become obscured. On the face of it, mass-production involves the output of vast quantities of goods for which no consumer has asked, and it is the producer who, by means of elaborate systems of advertisement and salesmanship, persuades the consumer to take his goods. To any ordinary view of the situation it appears clear, to use a military expression, that the initiative

has passed from the consumer to the producer. In the pre-industrial era, the consumer ordered the producer to produce an article for his consumption. Under modern industrial conditions, the producer manufactures goods and induces the consumer to take them.

This general distinction is, of course, subject to qualification. Even in the pre-industrial era, goods were produced for which no consumer had asked. The weaver or potter, in the intervals between working to order, produced goods on speculation, and if he could not sell them in his village, supplied them to a hawker, who vended them from village to village. And conversely, in the industrial order, it is still possible for the consumer to order a suit of clothes or a pair of boots or an article of furniture to be produced specially for him, and in the case of highly specialised articles such as ships or bridges the manufacturer produces only in response to a definite order from the consumer.

With these qualifications, however, it is true that superficially the producer manufactures goods not to satisfy the demands of the consumer, but to satisfy himself as producer. And, as producer, his satisfaction resides in making the largest possible profit, consistent with certain general standards of law and morality.

But it would be a mistake to conclude that the consumer, in the modern industrial order, is at the mercy of the producer. The consumer sometimes refuses to take the articles that the producer endeavours to induce him to buy. This is one explanation of the large number of industrial failures and bankruptcies. These producers have turned out goods which the consumers, in spite of all persuasion, have refused to accept. Or it may happen that the consumer refuses to take an article unless he can get it at what he considers a reasonable price. If this happens in a bazaar in Egypt or India, the producer reduces his price to the individual consumer. If it happens in the case of mass-products like the Ford car, as actually occurred in 1920, the price of the

product is drastically "cut" to all consumers throughout the world.

From these and other considerations which might be indicated, the conclusion appears to follow that, although superficially the producer takes the initiative, if we look below the surface we shall find that the consumer has the whip-hand. It is the consumer who pays the piper, and it is he who has the right to call the tune. Often he does not call the tune sufficiently loudly or sufficiently insistently, but in the end the producer is bound to give him the music he wants.

This does not mean that productive industry works consciously in the service of the community. The motive of individual profit and gain is probably much more frequently present to the mind of the individual producer than the direct service of the community. None the less, it should not be overlooked that the motive of service does often animate those engaged in industry, from the top to the bottom of the hierarchy. No workman likes to turn out shoddy work, and if he knows that the work he is turning out is shoddy, he feels a sense of shame. This shame is due to the fact that in a subconscious sort of way he knows that while such work may bring him good wages it is not good service to the community. And the big employer, though he hesitates to speak about "service to the community," which to him has a somewhat sentimental sound, much prefers to turn out good articles to bad ones.

It is usual to maintain that in respect of "service to the community" industry differs in its ideals from what are called "public services," such as the Army and Navy and the Civil Service. Thus, Mr. Delisle Burns, emphasising this distinction, points out that the public services are "organised as a service of those who are served, not of the servants," and declares: "The organisation of State services differs from that of industrial services in two ways: first, in the method of payment for service, and, secondly, in the

standard adopted by the payers."¹ He goes on to point out that in the State services payment is fixed and continuous. The soldier, the civil servant, the clergyman, and the teacher knows how much he may expect in a year. But in industry the employer, as shareholder, sometimes gets too much, and sometimes, perhaps, too little; and the worker, when he is unemployed, gets nothing at all, or much too little. Again, the payment given to soldiers or teachers is not fixed in the main by themselves, but in industry the amount given for the service performed is much more completely controlled by one section of those who perform the service. Finally, Mr. Delisle Burns maintains, the payment for State services is calculated by the payers, not by reference to the least possible amount which would be accepted, but by reference to the efficiency of the service.

A little consideration will show that these distinctions, while superficially plausible, will not bear examination. If we compare State services with industrial services of the same kind we shall find that in almost every respect they are similar. Compare, for instance, the post-office with the railways and the Treasury with a great bank. The post-office employee has virtual security of tenure, but so has, in practice, the railway employee, although employed in private industry. In fact, wherever the services provided by private industry are continuous, there employment is virtually permanent. And with regard to service of the community, it would be difficult to find any difference between the post-office and the railways, or between the L.C.C. tramways and the L.G.O.C. omnibuses. The private companies do, indeed, pay dividends from their profits, but over a period of years those dividends are not appreciably greater than the interest on capital invested in the municipal services.

Compare, again, a bank and the Treasury. The Treasury clerk has absolute security of tenure, the bank clerk virtual

¹ *Industry and Civilisation*, p. 79.

security. The bank clerk thinks of promotion, but does not the Treasury clerk also? Is the status of the head of a big bank "ignoble" compared with that of the Secretary to the Treasury? In both cases services are rendered to the public, but is the Treasury clerk more or less conscious of this than the bank clerk? Both wish to render efficient service within their fields, and neither is usually explicitly conscious that he is working in the service of the community. If we give a realistic interpretation of industry, let our interpretations of the public services be equally realistic.

But, in the end, the controversy whether productive industry is organised to benefit itself or the consumer is almost as sterile as the old controversy which vexed the eighteenth century whether the motives of action were primarily "self-regarding" or "other-regarding." The citizen is a complex of instincts and impulses, emotions, sentiments and desires, most of which, when analysed, are found to have, in varying degrees, a "self-regarding" and an "other-regarding" aspect. When, therefore, we are told, as Mr. Delisle Burns tells us, that "the organisation of industry ought to be for *giving* service, that is to say, it ought to be dominated by the desire to serve, not the desire to be served,"¹ we can only reply: "Psychologically, it can't be done." The citizen engaged in productive industry is no other than the man who, looked at from another angle, is the consumer. He is one and the same citizen, with his "self-regarding" and "other-regarding" instincts and impulses forming a strange complex; and, as engaged in productive industry, he serves himself and he serves the community, both.

Citizenship involves both self-development and service. "The highest conception of the good man's action is that of free service to an order of life, which on the one hand depends upon him for its maintenance, and on the other gives vent to his energies. Already in the family the scheme of such

¹ *Industry and Civilisation*, p. 89.

a principle is found in the care of a man for wife and child, prompted not by compulsion but by affection and rendered freely as his part of the domestic life. Morality is an extension of this free service."¹

§ 3. The Means of Consumption.—The citizen can consume only what the State gives him the right to consume. And, as a general principle, in the modern industrial world the State gives a man a right to consume only what he can pay for. In a primitive order of society, the individual consumes as much fruit and herbs as he can gather, and as much fish or meat as he can catch and prepare. But in the modern industrial society, as a general rule, men do not consume what they themselves obtain or produce. They consume only what they pay for.

To this general rule there are, of course, certain exceptions. Persons engaged in agriculture commonly consume a proportion of what they themselves produce, and a man whose trade is tailoring or boot-making may consume part of his own production. Again, in the modern industrial State all citizens consume, without paying at least directly for them, certain commodities and services provided for the benefit of all the citizens by the State itself or subordinate public authorities. Roads, bridges, and parks are at the disposal of all the citizens whether or not they have paid taxes or rates for their upkeep. The services of the police or of the Army and Navy are similarly provided free of direct individual payment to the citizens. Such services are, of course, paid for by the ensemble of the citizens through rates and taxes, but the services rendered are not charged up separately to the citizens. The pedlar who covers thousands of road miles in the year does not pay more for the privilege than the bed-ridden old man who never sets foot on a road. Apart, however, from these exceptions, it is true that in the modern industrial State the citizen consumes only what he can pay for.

¹ S. Alexander, *Moral Order and Progress*, p. 408.

In discussing the rights and duties of the citizen as consumer, it is therefore necessary to examine first of all the financial means of the consumer, for his financial means condition his consumption.

The stream of the financial means of the citizens of a State constitutes what economists call the national income.¹ The community may have an income in the form of intangible services apart from the "national income," but we are not here concerned with that. For the moment we are interested only in that part of the income of the community which is measured in money. In adopting this attitude we are following the practice of the British Income Tax Commissioners and the definitions of Marshall and Pigou.²

Such an attitude leads, of course, to certain paradoxes. It means, for example, that we must exclude from the national income the value of the produce of the farm that a farmer and his family consume directly. On the other hand, the produce of his farm that sells in the market is included in the national income. Prior to the passing of the Act providing for the payment of members of Parliament, the services rendered by them were not comprised in the national income, while now they figure in the national income at some £250,000. The services provided by women figure in the national dividend when they are rendered in exchange for wages, whether in the factory or in the home, but do not enter into it when they are rendered by mothers and wives gratuitously to their own families. These are paradoxes, but as it is impossible to assign arbitrarily a money value to services for which, in fact, no money payment is made, there is nothing to do but to accept them as paradoxes inherent in this field of economic science.

§ 4. The Distribution of Income.—Unfortunately, precise figures of the distribution of the British national income

¹ We are not concerned here with national capital.

² Marshall, *Principles of Economics*, p. 524 ; Pigou, *Economics of Welfare*, p. 33.

are unobtainable ; but the figures given in the Report of the Commissioners of Inland Revenue as to the amount of income that has come under the review of the income tax authorities enable certain broad generalisations to be made. The income that came under review in 1922-23 was £2,900,000,000, compared with £1,111,000,000 in 1912-13. This increase is partly to be accounted for by the lowering of the exemption limit from £160 to £130 in 1915-16. But the increase in the amount of income exempted from taxation, either because income was below the taxable limit or because of abatements and allowances, was very much greater, namely £356,000,000 to £1,570,000,000. In other words, while the total income was more than doubled, the taxable income was less than doubled. This would appear to indicate that the distribution of income was wider than it was ten years before. This conclusion is borne out by the researches of Dr. Bowley and Sir Josiah Stamp, published in their *The National Income*, 1924 : " The distribution of income [in the period 1911 to 1924] between wage-earners, other earners, and unearned income was changed slightly in favour of the earning classes. Manual workers, on the average, make slightly increased real earnings, and there have also been transfers for their benefit in insurance schemes and other public expenditure. When the full effects of taxation are taken into account, the real income available for saving or expenditure in the hands of the rich is definitely less than before the war."

That the distribution of income is in all countries very unequal is, of course, a commonplace. In Great Britain, for instance, it varies from 45s. or less per week to tens of thousands a year. It is also a commonplace that there is a very large number of people with incomes below the average income and a relatively small number above the average. The great majority of incomes are massed together about the lower end of the income scale, and a small minority of very large incomes sparsely scattered at the upper end.

It has been pointed out by Professor Pigou that the graph

of the distribution of income is not in accordance with the graph of the distribution of physical or mental characteristics. "When, for instance, a curve is plotted out for the heights of any large group of men, the resulting picture will not be, as with incomes, more or less like a hyperbola, but it will be a symmetrical curve shaped like a cocked hat. It will, in short, to use a technical term, be the characteristic Gaussian curve or curve of error, symmetrical about the mean, in such wise that there is no massing near either end, but equal numbers of heights above the average and below it, and a lessening number of people at every height as the distance from the average in either direction is increased. Now, on the face of things, we should expect that, if, as there is reason to think, people's capacities are distributed on a plan of this kind, their incomes will be distributed in the same way. But, in fact, they are not distributed in the same way." ¹

Professor Pigou goes on to point out the reasons for this difference in distribution. "Income depends," he states, "not on capacity alone, but on a combination of capacity and inherited property, and inherited property is not distributed in proportion to capacity, but is concentrated upon a small number of people not selected in accordance with their own, or even, in many families, their parents' capacity, but owing to their good fortune, perhaps to their being only sons or daughters, perhaps to some other "accident." ²

This inequality in the distribution of income is not peculiar to any country or age. A glance backwards shows that it is a phenomenon which emerges at every period in history. It was an essential feature of the feudal system, with its territorial overlords and their dependent fiefs. Earlier still, it was characteristic of Roman society with, on the one hand, its rich patricians and, on the other, its proletariat freemen kept on good behaviour with *panem et*

¹ A. C. Pigou, *Economics of Welfare*, p. 696.

² *Ibid.*, p. 696.

circenses. In Carthage, which was a purely capitalist State, frankly ruled by a commercial plutocracy, "labour" had no rights at all, except to labour. In Athens there was an appearance of greater equality, owing to the simplicity of life and moderation of spirit of the Athenians, but this equality among the citizens was made possible only by the institution of slavery. And in spite of the relative equality that prevailed, difficulties were always arising, even in the most democratic period of Athenian history, between the rich nobles and the poor citizens. And even in such a primitive pastoral society as that of which we read in the Book of Job, the existence of inequality is strikingly evident. Job was "the richest man in all the East," and he was surrounded by serfs.

In the modern industrial world, the distinction between "rich" and "poor" is in general alignment with that between "capital" and "labour." "In general alignment," we have said, not "identical," for it is becoming more and more difficult to identify the "rich" with capital and the "poor" with "labour." If, on this point, we take the analysis of an economist like Pigou, we find that he goes far towards a complete identification of the two pairs of terms. He points out that by far the largest part of the poorer classes in Great Britain consists of wage-earning workpeople.¹ This is illustrated by the fact that whereas before the war wage-earners numbered some 15½ millions, persons other than wage-earners with incomes below £160 a year numbered, say, 3½ millions.² And Pigou concludes: "Just as we have agreed roughly to identify the poor with the wage-earners, we may agree also to identify the earnings of wage-earners with the earnings of the factor labour."³

But one or two important distinctions must be made. On the one hand, the "capitalist" does not usually limit

¹ A. C. Pigou, *Economics of Welfare*, p. 702.

² Bowley, *The Division of the Product of Industry*, p. 11.

³ Pigou, *Economics of Welfare*, p. 703.

himself to the supply of capital. In exceptional cases, indeed, his contribution to the industrial process may be confined to the supply of capital. As a "sleeping partner" in a firm, or a passive shareholder in a company, in whose management he takes no concern, he does nothing but supply capital. But many "capitalists" are also intimately concerned with the businesses in which their capital is invested, either as directors or as workers. And a small "capitalist," such as a shopkeeper, in addition to supplying capital, provides not only brain-work in managing his business, but probably a good deal of manual labour as well.

On the other hand, the manual labourer is frequently also a capitalist in a small way. In recent years the extent to which manual workers in the United States, Great Britain, and other countries have become investors of capital is very striking. This becomes clear if we examine the available statistics.

For England and Wales in 1920-1921 the following estimate has been made by Professor Henry Clay :—¹

Range of Capital.	Number of Owners.	Amount.
£		Millions of £.
Under 100 . . .	13,500,000	912
100-500 gross . . .	2,099,700	546
100-1000 net . . .	1,026,200	746
1000-5000 . . .	791,500	2,046
5000-25,000 . . .	236,900	3,078
25,000-100,000 . . .	41,180	2,079
100,000-500,000 . . .	7,100	1,785
Over 500,000 . . .	537	670
All . . .	17,703,117	11,862

If these figures be compared with those of the pre-war distribution of capital, two interesting facts emerge : In the

¹ *Proceedings of the Manchester Statistical Society, 1924-1925, p. 73.*

first place, the number of estates over £100 probate value has gone up, and roughly in proportion to the rise in prices. In the second place, there has been a fall in the number of owners of large fortunes of over £500,000. On the whole, there is a distinct change in the distribution of capital in the direction of a lessening of inequality.

It still remains true, however, that capital in England and Wales is much more concentrated than it is in any other country. Professor Clay attributes this, no doubt rightly, to the fact that agriculture, and other productive activities in which small-scale enterprise predominates, constitute a smaller part of the economic activities of England than of any other country. The industrial wage-earner, much the largest economic class in the community, has little capital, although his standard of life is high as compared with that of most Continental wage-earners.

There is no doubt, however, that the invested savings of the wage-earners are relatively rapidly increasing. The following table (p. 195), compiled by Professor Clay, shows that the aggregate of working-class savings in England and Wales amounted, in 1921, to nearly one thousand million pounds sterling.

In 1912 the volume of working-class savings amounted to less than half the sum: £455,000,000 is the estimate of Professor Clay.

In the United States also the number of investors and the total amount of investments are rapidly increasing. A careful estimate places the increase of holders of securities in the United States at from 4,400,000 in 1900 to 14,400,000 in 1924.

This increase is partly due to the movement to interest the workers in the establishments in which they are employed by inducing them to own stock in the companies. These "Stock Distribution" plans, as they are called, vary greatly in the motives which have prompted them, and in the facilities which are granted to the workers to buy

No. of Members or Accounts.	Investment or Fund.	Total (Million Pounds).
16,000,000	Savings Bank Deposits—	
1,425,000	Post Office	264
—	Trustee	73
124,800	Special investment department .	16
—	Railway	11
789,000	Savings Bank Stock held for de- positors	29
551,600	Building Societies	93
21,200,000	Co-operative Societies	142
6,613,000	Registered Friendly Societies .	92
—	Trade Unions	16
—	National Health Insurance Fund .	83
—	Unemployment Insurance Fund .	7.6
—	Industrial Life Insurance: Life Fund	89.5
—	Savings Certificates (one-half net subscriptions)	171.1
		1072
	Proportion for England and Wales only	940

shares. The chief motives have been to put the industrial enterprise in question in a stronger position before public opinion by creating a wide diffusion of ownership, to endeavour to inculcate a feeling of respect and responsibility for property among the workers employed, to encourage individual thrift, and in some cases at least to strengthen the inducement of the worker to remain in the employ of the particular enterprise, and to cut down labour turnover. In practically all schemes, the purchase by the wage-earner has been facilitated by arranging for deductions from the pay-roll, and in some cases by sale below market price or otherwise by special terms.

The response of the workmen to such offers has been extremely ready. The average workman in the United States has no prejudice against the ownership of securities, but is eager to get a chance to become a capitalist. The opportunity of holding securities which would be likely to

increase steadily in value has been a great inducement to individual thrift.

The extent to which ownership of shares has recently spread is very striking. In 1910 there were only 300,000 stockholders in railroads in the United States ; in 1924 there were over 800,000, the net addition being largely made up of railroad employees. It is estimated that 630,000 people own telephone securities in the United States, of which a very large percentage are the employees of the telephone companies. Besides investments in securities, American wage-earners have considerable investments in life assurance, savings bank deposits, and building and loan associations.

From the standpoint of citizenship, with its economic, social, and political implications, this widening of the distribution of wealth is of the highest importance.

Although an approach towards a larger measure of material equality is taking place, further progress in this direction is undoubtedly desirable.

There are those who say that, however ethically just this may be, the facts show it to be economically impossible. The famous " law " of Pareto, based on an elaborate inductive argument, involves the conclusion that it is impossible for the absolute share of the national dividend that goes to the " poor " to be increased by any cause which does not at the same time increase the national dividend as a whole. It would tend to follow that it would never be possible to do anything to redress the existing balance of inequality.

The basis of Pareto's law has in recent years been largely discredited by the criticism of other economists, and Pareto himself has recognised that a change in social organisation might lead to results other than those that would be considered possible in accordance with the law. There are now few economists who would not agree that much may be done, even without attempting to interfere with the principles of social organisation, to secure greater equality in the distribution of national income.

We may therefore conclude that greater equality is possible and also that it is desirable.¹ This desirability is specially evident from the physiological standpoint. The fact emerged during the war that, in spite of the real shortage of food in England from 1916 till 1918, there was, owing to its more equal distribution, actually less ill-health in these years than in pre-war times. This fact was supported by many independent investigators, one of whom may be quoted. The School Medical Officer of the London County Council, in his report for the year 1918,² concludes as a result of the examination of more than 200,000 children: "The story is one of which London may be proud, for it is one of continuous amelioration throughout the whole period of the war. Whether judged from the state of the children's clothing, from their health as expressed by their nutritional well-being, or from the conditions found as regards cleanliness, the result is the same, practically steady improvement in each particular."

§ 5. **Wealth and Welfare.**—It may perhaps be objected that undue emphasis has been placed on money income as the material basis of welfare. It may be said that the citizen as consumer should not be preoccupied with money, and that he may secure much satisfaction as a consumer without putting his hand in his pocket at all. An interesting protest against an exaggerated view of the importance of money income as a source of welfare has recently been voiced by Mr. W. A. Robson in his book, *The Relation of Wealth to Welfare*. He there maintains, after an examination of

¹ But we must avoid the error of thinking that an equal distribution would make everybody rich. Just before the war Bowley calculated that the total output of Great Britain, the richest country in Europe, was so small that even if it were evenly divided it would yield no more than an average net income of £162 for an average family of 4½ (A. L. Bowley, *The Division of the Product of Industry*, p. 49), and still more striking figures have recently been compiled by Sir Josiah Stamp.

² P. 3.

certain aspects of social life, that welfare is by no means proportionate to money income, and that if the "measuring rod of money" be employed, it may give an entirely false idea of real welfare. This general thesis is illustrated by an examination of four elements in well-being: health, work, art, and education.

With regard to health, Mr. Robson analyses the results of the medical examination, in 1917-1918, of 2,425,184 men of military age in Great Britain. This examination showed that agriculture, although one of the worst paid occupations in England, provided the largest proportion of Grade I. men, i.e. those thoroughly healthy. On the other hand, "the average income of the members of the Indoor (Active) Group is almost certainly higher than that of any other on the list, including, as it does, the highly-paid legal and dental professions, the teacher and the chemist; yet the relatively great personal wealth of these men does not secure for them a passable standard of health and fitness, and the group ranks seventh in the list."¹ The general conclusion drawn from these statistics is that "they demonstrate conclusively the absence of a direct relationship between private income and personal health."² This conclusion, Mr. Robson maintains, is supported by the consideration that the general hygienic environment is to a large extent a common one for rich and poor alike.

Turning to art, Mr. Robson continues his analysis. He points out that from the standpoint of æsthetic appreciation it makes no difference whether a man owns a beautiful picture or only has access to it in a public gallery. His sense of the beautiful is stimulated in precisely the same way in the two cases. The only difference is that in the one case the instinct of acquisitiveness is satisfied. As, therefore, ownership plays no part in the perception of artistic beauty,

¹ W. A. Robson, *The Relation of Wealth to Welfare*, p. 34.

² *Ibid.*, p. 34.

" the size of a man's income is not likely to add considerably to his ability to partake of æsthetic experience." ¹

Up to a point this judgment would appear to be sound. To the individual citizen it makes no difference, from the standpoint of æsthetic appreciation, if a beautiful picture is in his own house or in a public gallery. And to the body of citizens as a whole it is clearly of advantage that it should be in the public gallery, where all may see it. All that is true, but it is also true that a certain level of income and a certain level of leisure are necessary if the citizen is to be able to come to a work of art, whether a picture or a symphony, with a mind prepared to appreciate it. This level of leisure need not be high. Everybody who works an 8-hour day enjoys sufficient leisure for the appreciation of art. Nor need the level of income be high. But it must be high enough to give to the citizen and his family the material means of the " good life."

The dividend of contentment supplied to different men by a given sum of money is by no means the same. The satisfaction that men and women obtain from their incomes depends, in great measure, not on their *absolute*, but on their *comparative* magnitude. " Men do not desire to be rich," wrote Mill, " but to be richer than other men." One man may be richer than the " other men," with whom he compares himself, if he has £200 a year; the next may be poorer than the " other men " if he has £1000 a year. And even if all incomes were equal, there would be inequality in real welfare. Suppose even the main heads in the family budget to be the same—food, clothing, shelter, amusement, education, drink and tobacco, books—the proportions spent under these various heads may vary enormously. One man may spend 40 per cent. for food, 20 per cent. for clothing, 25 per cent. for shelter, and 15 per cent. for all the rest. The other may spend 40 per cent. for drink and tobacco and 60 per cent. on all the rest. Nor are these imaginary cases fanciful.

¹ W. A. Robson, *The Relation of Wealth to Welfare*, p. 65.

Any examination of family budgets collected by government departments or social workers will show the same results. Very few of such actual budgets will conform to the ideal budget established by the social reformer.

Now, these facts have two interesting corollaries of special interest from the standpoint of citizenship. The first is that equality in financial economic power by no means results in equality in the actual expansion of the self which takes place when resources are consumed. The same financial means may be so expended as to secure ends in the one case full of value-for-life and in the other vitally destructive. One man may spend a quarter of his income on the education of his children, another the same proportion on the purchase of morphia. And in the life of communities and nations the same differences have been revealed by history.

The second result is that a large field lies before the educator and the social reformer in educating the citizen in the best use of his resources. An approach to greater equality may produce a higher general level of material well-being, but without education it will not necessarily lead to better citizenship. It is only the material basis of better citizenship. And good citizenship means also that the citizen has work in which he can take an interest and that he has leisure which he can employ to the advantage of himself, his family, and his community.¹

§ 6. Wages and Dividends.—We have seen that the consumer normally obtains the means of consumption, in the modern industrial order, either in the form of wages for labour or dividends on capital.

¹ The truth that wealth does not mean happiness has been interestingly illustrated by Anatole France in his *Sur la Pierre Blanche*. He there shows us a man transported in a dream into the year 2270, who learns that a six-hour working day has glutted Europe with wealth. He asks an inhabitant of this dream-world, "Are you happy?" and receives the reply, "Happiness is not for men to taste. But life is now tolerable for all: and that is something."

We must now examine the conditions under which labour earns wages and capital earns dividends, with a view to ascertaining, from the standpoint of citizenship, some of the reasons for the diversity in returns obtained in respect of wages by labour and in respect of dividends by capital.

The two main reasons for this diversity are similar in the case of capital and of labour alike. In both cases these reasons are, firstly, difference in the technical skill of the persons providing labour or providing capital, and secondly, difference in the knowledge possessed by these persons where and how to apply their special skill to best advantage.

In the case of capital, returns in Great Britain normally vary from about $4\frac{1}{2}$ per cent. on Government stocks, to 10 per cent. or 12 per cent. on speculative shares. Such limits may be regarded as normal limits, within which varying degrees of return may be obtained in accordance with the security of the stock or share. But, as is well known, some shares give no return at all, and others give anything up to 50 per cent. It depends very largely on the technical skill of the persons investing capital what rate of dividend they receive. Big investment trusts and insurance companies, which employ a staff giving all its time to the study of the stock market, are able regularly to earn, with practically no risk, on the capital invested 9 or 10 per cent. At the other end of the scale comes the average small amateur speculator or "plunger," who over a number of years is lucky if his capital is intact, quite apart from the question of dividends. Between these two extremes come the great mass of owners of capital, who earn on their capital larger or smaller dividends roughly in accordance with their technical skill in investment.

With wages the case is very similar. In Great Britain, for instance, here are some typical wage rates at July 1, 1927: general labourers in the furniture trades had a weekly wage of 62s., in the building trades of 65s., and in the printing and book-binding trades of 71s. Bricklayers had a wage of 85s., cabinet-makers of 84s., and machine compositors of

96s. If we take into comparison intellectual labour, we find that civil servants' wages or salaries vary from about the level of the manual worker to £3500 a year for the Secretary to the Treasury.

These wide divergences in the remuneration of labour, manual or intellectual, corresponding to the similar divergences in the remuneration of capital, are due in the main to differences in the technical skill required.

But there is another factor. The owner of labour, equally with the owner of capital, must not only possess technical skill, but must know where and how to employ it. It is possible that the bricklayer's labourer, now earning 65s. a week, if he had known as a boy how to get into business, might have been earning £1000 a year. It is possible that the owner of capital, now receiving $4\frac{1}{2}$ per cent. on mortgages, might have been receiving 10 per cent. on some stock exchange security. It all depends on knowledge where to place the labour or capital in question.

In the case of wages, great differences exist between the rates paid in the same industry from country to country, and even in different parts of the same country. In any comparison of wages in different countries, if we are to avoid misleading conclusions as to the power to consume supplied by these wages, it is necessary to know not only the prices of various staple foodstuffs in the particular countries, but also the quantities of these foodstuffs normally consumed and the proportion of the total wage usually expended on the purchase of food. It is well known that in different countries very different quantities of various kinds of foodstuffs are consumed; how different these quantities are is well shown in the first of the following tables.

The sum total of the items in each column may be regarded as a week's basketful of provisions for one adult. The cost of this basketful can be calculated for each centre by the prices of foodstuffs ruling there. The proportion of income spent on food also varies from country to country, as the second of the following tables indicates:—

ITEMS OF FOOD USED IN THE COMPARISON OF REAL WAGES
AND QUANTITIES PER CONSUMPTION UNIT PER WEEK

Item	Quantities per Adult per Week ¹					
	Great Britain	France and Belgium	Southern Europe	Central Europe	Scandinavian Countries and Netherlands	Oversea Countries
Bread	2 10	4 50	2 50	3 50	1 64	1 50
Flour	1 25	0 25	1 00	0 30	1 43	1 00
Butter	0 17	0 24	0 10	0 08	0 22	0 20
Margarine	0 05	0 08	0 05	0 12	0 15	0 06
Beef	0 50	0 50	0 40	0 22	0 21	0 70
Mutton	0 20	—	0 10	—	0 025	0 115
Bacon	0 12	0 20 ²	0 12	0 11	0 21 ³	0 20 ⁴
Potatoes	1 50	3 00	0 75	5 20	2 30	2 00
Sugar	0 60	0 35	0 18	0 25	0 63 ⁵	0 40
Coffee	0 01	0 20	0 06	0 20	0 13	0 105
Tea	00 10	—	—	—	—	0 03
Cheese	0 08	0 10	0 10	0 13	3 10	0 10
Eggs	2 75	3 00	3 00	0 75	3 30	4 50
Milk	1 20	1 70	1 50	2 10	6 40	1 86
Rice	0 135	0 06	0 50	0 40	0 23	0 09

EXPENDITURE ON FOOD AS PERCENTAGE OF TOTAL EXPENDITURE
IN VARIOUS COUNTRIES

Country	Date of Enquiry	Expenditure on Food as Percentage of Total Expenditure	Country	Date of Enquiry	Expenditure on Food as Percentage of Total Expenditure
Belgium	1921	64 9	Denmark	1922	41 8
France (Paris)	1914	60 0	Netherlands (Amsterdam)	1922	51 2
Austria (Vienna)	Post-war (estimate)	65 0	Norway	1912-13	47 9
Poland (Warsaw)	Post war (estimate)	50 5	Sweden	1913 14	43 0
Gt Britain	1904 and 1912	60 0	United States	1918-19	38 2
Italy (Milan)	1913	62 09	Australia	1913	41 16

¹ Kilogrammes, except for eggs (units) and milk (litres)² Pork³ Including pork⁴ Including ham and pork⁵ Including molasses

It is by taking all these factors into account that it is possible to construct a series of index numbers to give a genuine comparative conspectus of real wages in various cities. If London be taken as a basis, and the index number of real wages in London represented by 100, the figures for other cities are as follows: Amsterdam, 87; Berlin, 67; Brussels, 48; Copenhagen, 110; Lodz, 44; Ottawa, 163; Philadelphia, 188; Prague, 47; Riga, 50; Rome, 43; Stockholm, 101; Vienna, 43; Warsaw, 39.¹

We may interpret the figures by saying that the worker in London is more than twice as well off as the worker in Rome or Vienna or Brussels, that he is nearly one-and-a-half times as well off as the worker in Berlin, but that he is considerably less well off than the worker in Philadelphia or Ottawa.

If this be so, the question may immediately be asked why the workers in all countries do not go to America, where they would be twice or three times or six times as well off as in their own countries? And the answer is that they would like to go, but the immigration regulations of the United States make it possible for only a small proportion of those who would like to go to enter America. Why, then, it may be said, does the worker in Milan or in Warsaw not go to London or to the Scandinavian countries? Again the answer is that they would like to go, but alien and other regulations make entry difficult. And in all these cases migration from country to country is rendered difficult for other reasons. Many workers consider that it is better to work for small wages where they are certain of regular employment and where they have their friends and relations than to launch into the unknown. Then, again, emigration costs money and many of these workers, especially if they are married, and of course the majority are married and have families, cannot save the necessary capital to transfer themselves and their families from one country to another.

¹ These figures relate to July 1, 1927. See *International Labour Review*, October, 1927, p. 559.

Finally, as an obstacle to free movement, there is the language difficulty. A skilled man in a particular trade in Warsaw or Brussels or Lisbon could not immediately get a job in the trade in which he was skilled in Amsterdam or Stockholm or London. He would have to make himself familiar with the language of his new country, and to many this presents insurmountable difficulties. All these reasons explain, partially at least, why labour does not flow to where high wages are to be earned with the same rapidity and ease as capital flows to where high dividends are to be gained. The international transfer of capital is extremely easy. If an owner of capital finds that he can obtain a higher rate of interest in New York than in London, a letter to his banker or broker to sell in London and buy in New York is all that is necessary. The transfer is easily and rapidly made, and the expense of the transfer is very slight.

The importance of knowledge where to place capital was well illustrated in 1924 in the difference in yield obtainable in New York and in London on European dollar and sterling securities. Many European investors of great technical skill and experience remained for long in ignorance of the advantages that could be secured by a transfer of their capital from sterling securities to dollar securities, for example in the case of the Austrian loan. This difference in return was due primarily to the greater scepticism of American investors in regard to the economic future of Austria and the soundness of the guarantees of the guaranteeing States Members of the League.

So far, in our discussion of wages and dividends we have not explicitly taken into account the consequences of the fact that wages and dividends provide the means of consumption. That this aspect of wages and dividends should be paramount was, indeed, implied by the fact that this discussion takes place in the chapter on "The Citizen as Consumer." The consequences of that view we must now examine.

Ordinarily, the wage a man earns by his labour or the dividend he receives on his capital does not in any way depend on his needs as a consumer. The poor man does not receive a higher rate of dividend than the rich man on the same investment. Normally the same wage is obtained by a single man and a man with six children, if they work the same period (time-rate wages) or produce the same output (piece-rate wages). It clearly follows that if this wage is just sufficient to maintain a single man, it is inadequate for a married man with a large family dependent wholly on his earnings, while if it is adequate for him it leaves a considerable surplus for the single man. Thus, though from the standpoint of production the workers are on the same footing, they are obviously not on an equality as consumers.

If, however, we look a little below the surface, we shall find that in the fixation of wages the consumer's needs are not so completely neglected as the above example would tend to suggest. The normal wage is almost always regarded as the wage of a married man with a family. In the collective bargaining which has become almost universal as the means by which wages are fixed, the basis of wage demands put forward by trade unions tends to be the needs of an "average" family; for instance, a man, wife, and three children. Such a wage, if sufficient for the consumption of an average family, would, of course, leave a surplus in the case of a single man. But the inequity of this is more apparent than real. In the first place, the number of single workers, relatively to the number of married workers, is small. Further, only a very small proportion of this small minority is free from family charges of some kind. Most unmarried workers either contribute to the support of parents or other relatives or make savings with a view to marriage. On the whole, therefore, and very roughly, we may say that the normal wage does take some account of the needs of the worker as a consumer, and that these needs are those of a family of consumers.

But because this is true only roughly and on the whole, endeavours have been made in certain countries to adjust wages more scientifically to the needs of the workers as consumers. The system which has been most generally adopted is that of family allowances.

Family allowances may be described as an attempt to apply the social principle of payment according to the needs of the workers as consumers, as a corrective to the more or less mechanical working of economic tendencies.

On the Continent of Europe, notably in France and Belgium, the family allowance system is adopted on a large scale. The principle is to pay, in addition to the basic wage, an allowance for each dependent child, in order that the head of the family may have an income roughly corresponding to the number of mouths he is responsible for feeding. The schemes vary very greatly in their system of organisation and in the amounts of allowance for each child.

The number of workers covered by such schemes is so considerable as to show that the method of taking account of the needs of the worker as a consumer has definitely passed the experimental stage. In France the total number of workers in receipt of family allowances amounts to about 4,000,000. In Belgium the number is 500,000, and in the Netherlands some 87,000 workers are covered. For other countries complete figures are not available, but it has been estimated that in Europe as a whole, excluding State servants, nearly eight million workers are employed in establishments paying family allowances in some form or another.¹

The motives which have led to the payment of family allowances, while diverse, are all "social" in character. They all have a close relation to problems of citizenship. There is, first, the argument that the payment of family

¹ Paul H. Douglas, *Quarterly Journal of Economics*, February, 1924, p. 250.

allowances will improve the health and general welfare of the children and will lead to a reduction in infant mortality. Working-class mothers, it is contended, will not so frequently be compelled to take employment themselves, and will be able to devote more time and care to their children. In countries in which it is desired to increase the population, it is argued that family allowances will encourage larger families among the workers. Hence the general provision that the allowance for each child increases with the number of children. In some centres it is claimed by the employers who pay family allowances to their workers that this leads to an improvement in industrial relations, as an element of social justice is thus introduced which is missing in the ordinary employment contract. They also maintain that the system tends to reduce labour turnover in their establishments, as workers with families prefer to remain where they can be certain of receiving family allowances. But whichever of these arguments may have been predominant in any particular country and industry in leading to the payment of family allowances, it is already clear that this system marks the adoption, in certain countries at least, of the principle that the industrial worker should be paid not merely as a producer but also as a consumer.

It is in this spirit that measures have been taken in many countries to establish minimum wages in low-paid industries. In most of the more advanced industrial countries the wages paid in the well-organised industries are sufficient to meet at any rate the most urgent needs of the producer-consumer. But in the case of certain industries, even in the richest industrial countries, the State has considered it necessary to intervene and fix minimum wage rates in order to ensure to the worker at least a minimum standard of consumption.

At first minimum wage legislation was chiefly intended for the protection of the home-workers, and more particularly the women home-workers. Popular imagination was

stimulated by the terrible conditions portrayed by Thomas Hood in the famous *Song of the Shirt*. The picture of the woman home-worker surrounded by children in rags in a miserable bedroom, working by a guttering candle until the small hours of the morning, was vivid in the extreme. The factory worker, however underpaid and miserably housed, at least moved out daily from home to factory, and her dreary existence could not be pictured in the same way. Hence it was the suffering of sweated home-workers that forced a change of attitude towards the legal regulation of wages, not only on the part of statesmen and reformers, but also in the view of economists. While the original impulse to minimum wage legislation still affects its character in some countries, in others a development has taken place in the direction of making minimum wage legislation apply to whole trades or industries. Thus, on the Continent of Europe, where minimum wage legislation is in operation in France, Norway, Austria, and Czechoslovakia, it applies only to home-workers, or more properly to out-workers, i.e. to workers who are not employed in factories. Again, in the United States and Canada minimum wage legislation applies only to women workers and minors, but not exclusively to home-workers. It is in Great Britain that minimum wage legislation has attained its greatest development.

The British system of minimum wage legislation operates, as is well-known, by means of the Trade Board. According to the Trade Boards Act of 1918, which amended the original Act of 1909, the Minister of Labour may extend the provisions of the Act to any trade "if he is of opinion that no adequate machinery exists for the effective regulation of wages throughout the trade and that accordingly, having regard to the rates of wages prevailing in the trade, . . . it is expedient" that the Act should apply to it. In accordance with this Act, Trade Boards have been established in some thirty branches of trade, and in spite of complaints and

criticisms, official enquiries have established that the operation of the Act is beneficial. It has raised wages to a level that, while not adversely affecting the economic prosperity of the trade, makes it possible for the worker to meet his urgent needs as a citizen.

Such measures as these, whether taken by the State or by the workers' and employers' organisations in agreement, tend to establish rates of wages that take account of the citizen's needs as a consumer.

In the case of dividends on capital, the counterpart of wages of labour, the State often takes measures to safeguard the reasonable interests of the capitalist. In these cases the State attempts to protect the owner of capital against some of the results of his own ignorance or imprudence. Thus, in Germany, the owner is protected in two ways. In the first place, since the ignorant owner is usually, but not always, the small owner, the flotation of new companies on the basis of shares of extremely low nominal value is forbidden by law. In the second place, the promotion of new companies is usually kept in the hands of the banks, which not only have technical experts who can examine the soundness of new ventures, but also feel a responsibility for the success of any company in whose flotation they assist. In this way the small investor is less likely to be tempted to invest in harebrained schemes.

In most countries, if regulation does not go so far as in Germany, it exists, and is more or less effective. Prospectives of new companies must be duly registered, fraudulent promotion is guarded against by special legislation, and stock exchanges have certain regulations with regard to the admission of securities to be dealt in on the exchange.

In these ways the owner of capital is protected against loss through ignorance. If he possesses knowledge, both the general knowledge of which Aristotle speaks and which enables him to take advantage of political events and prospects, and the special knowledge of the companies in

which he invests his capital, he can benefit greatly by securing a higher rate of return.

Whatever be our system of social organisation, inequality in wages for labour and dividends on capital must always continue to exist. Steps may be taken by the State to secure that the wage for labour and the dividend on capital never fall below a certain minimum. Thus, in many States, as we have seen, a minimum wage is fixed, particularly in industries in which the workers are ignorant and badly organised, in order to protect them against their own ignorance and to ensure to them at any rate a minimum return for the labour which they give. Similarly, in many States, State and municipal savings banks, or government securities of a popular kind, such as British National Savings Certificates, are established, which protect the ignorant owners of capital against their own ignorance and ensure to them at any rate a minimum return on the capital they invest. In one case the worker is protected by the State against exploitation by the unscrupulous employer, in the other case the capitalist is protected by the State against exploitation by the unscrupulous company promoter.

In these ways the State seeks to facilitate the acquisition by its citizens of a minimum standard of the means of material well-being

§ 7. Expenditure.—How are the means expended? How are the financial and other resources of the consumer actually laid out in the purchase of the commodities desired for consumption? What are the necessities for consumption? Marshall has given a useful catalogue of the main necessities “for the efficiency of an ordinary agricultural or of an unskilled town labourer and his family, in England, in this generation.” “They may be said to consist of a well-drained dwelling with several rooms, warm clothing, with some changes of underclothing, pure water, a plentiful supply of cereal food, with a moderate allowance of meat and milk, and a little tea, etc., some education and some recreation,

and lastly, sufficient freedom for his wife from other work to enable her to perform properly her maternal and her household duties. If in any district unskilled labour is deprived of any of these things, its efficiency will suffer in the same way as that of a horse that is not properly tended, or a steam engine that has an inadequate supply of coal. All consumption up to this limit is strictly productive consumption : any stinting of this consumption is not economical but wasteful. In addition, perhaps, some consumption of alcohol and tobacco, and some indulgence in fashionable dress are in many places so habitual, that they may be said to be *conventionally necessary*, since in order to obtain them the average man and woman will sacrifice some things which are necessary for efficiency. Their wages are therefore less than are practically necessary for efficiency, unless they provide not only for what is strictly necessary consumption, but include also a certain amount of conventional necessities." ¹

There is undoubtedly waste of welfare, not only to the individual citizen but also to the community as a whole, if consumption cannot be maintained at a sufficient level to make and keep him not only an efficient instrument of production but also a good and effective member of the community. Necessaries should include not only necessities for existence but also necessities for efficiency. And necessities for efficiency should include not only sufficient provision for health and strength, but sufficient provision for leisure and all that contributes to the performance of the social duties of citizenship.

It is impossible here to go into detail with regard to the distribution of income on the various categories of expenditure. Some of the statistical information that has been collected does, however, throw an interesting light on the problem. Reliable figures have been obtained in the United States by the United States Bureau of Labor. In 1918-1919 a budget investigation covering 12,837 families in all

¹ *Principles of Economics*, pp. 69-70.

States of the Union was made, with important results. It was found that the average size of these families was 4·9 persons (almost exactly two adults and three children) and the percentages of the total income expended in various ways was as follows: house, 12·6 per cent.; food, 36·0 per cent.; clothing, 15·8 per cent.; fuel and light, 5·1 per cent.; furniture and miscellaneous, 25·4 per cent.; and surplus, 5·1 per cent. It is worth while noting also that the figures for the various States individually do not vary very much from this average for the United States as a whole. Thus the proportion of expenditure on house-room varies from 9·6 per cent. in Alabama to 15·7 per cent. in Oklahoma, the expenditure on food from 31·6 per cent. in Delaware to 42·9 per cent. in Massachusetts, and so on. The greatest disparity is to be found in the column entitled "surplus," where the proportion varies from 1·7 per cent. in South Carolina to 10·4 per cent. in Arizona.

Another result of the same enquiry was to support the "laws of consumption" first enunciated by Engel, that as the income of a family increases, a smaller proportion is spent on food, and a greater proportion is spent on education, health, recreation, amusement, and so forth. The following table will show this in detail:—

VARIAION IN DISTRIBUTION OF EXPENDITURE IN DIFFERENT
INCOME GROUPS.

Income Group.	Number of Families.	Percentage of Average Yearly Expenditure per Family for					
		Food.	Clothing.	Shelter.	Fuel, Light.	Misc.	Total.
Under \$900	332	44·1	13·2	14·5	6·8	21·4	100·0
\$900-1200 .	2423	42·4	14·5	13·9	6·0	23·1	100·0
\$1200-1500	3959	39·6	15·9	13·8	5·6	25·0	100·0
\$1500-1800	2730	37·2	16·7	13·5	5·2	27·3	100·0
\$1800-2100	1594	35·7	17·5	13·2	5·0	28·5	100·0
\$2100-2500	705	34·6	18·7	12·1	4·5	30·0	100·0
\$2500 and over	353	34·9	20·4	10·6	4·1	30·1	100·0

The tendencies illustrated by this table become even more noticeable when the income passes beyond the moderate and becomes large. This is clearly shown in the following table, based on the results of an enquiry conducted by the American National Bureau of Economic Research:—

DIFFERENCES IN DISTRIBUTION OF EXPENDITURE.

Annual Income.	Food.	Housing.	Fuel, Light.	Auto-mobiles, Yachts.	Wages of Servants.	Clothing.	Miscellaneous.
Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
\$5,000	27.2	18.0	3.3	9.2	4.5	14.3	23.5
\$10,000	19.2	18.3	3.2	9.8	9.5	11.9	28.1
\$20,000	13.7	18.9	2.8	10.0	12.3	9.3	33.0
\$30,000	10.4	19.5	2.4	10.0	12.9	8.1	36.7
\$40,000	7.9	20.1	2.1	10.0	13.3	7.1	39.5
\$50,000	6.1	20.7	1.8	10.0	13.7	6.4	41.3

It follows from these figures that in an industrial community the ordinary wage-earner spends about half his income in the purchase of food. In countries such as the United States, where wages are high, less than half this income is thus spent, while in countries like Belgium and France, where wages are relatively low, more than half the income is spent on food.

The proportion of the income spent on various categories of expenditure also varies greatly, as our tables indicate, in accordance with the total amount of the income. Where income is barely sufficient to meet the needs of existence, a very high percentage will be spent on the elementary necessities of food, clothing, and shelter. As the income rises, a rise takes place also in the amounts spent on these fundamental needs, but this increase is not proportionate to the increase in the total income. The expenditure on food, in particular, becomes inelastic, and when incomes are very large, the expenditure on food sinks to an insignificant percentage.

If we now consider expenditure on recreation and amusement, we find that while on the lowest levels this item accounts for a negligible proportion of the total income, it is exceedingly elastic, and as the income grows this item grows not only absolutely but also relatively to the income. It is, in fact, the only rubric under expenditure which seems capable of indefinite expansion.

It is to be noted, too, that as incomes rise, the proportion of "surplus" grows. This is natural, because the larger the income the larger the margin which may be set aside for future needs. The fact that the surplus becomes larger, the larger the income, is due not to the fact that the citizen finds it impossible to consume his whole income, but that he desires never to fall below his present standard of consumption, and in view of life's uncertainties, seeks to ensure to himself a relatively high standard of consumption in his old age by saving as large a surplus as is reasonably practicable.

§ 8. Savings, Investment, and Insurance.—In a developed community, the citizen not only thinks of his daily bread, but seeks to secure for himself the permanent possibility of consumption. He wishes to attain to a position of financial security. In the pastoral era, the element of security was obtained by the rich man in the possession of land, of children and slaves, of flocks and herds and stores of grain. The poor man also hoarded in kind, even if he had to be content simply with a little extra store of household utensils and napery. The security provided in this was, however, often found by sad experience to be only relative. The experience of Job, though dramatic, was not unusual. Land might be laid waste by enemies, children and slaves killed or taken prisoner, flocks and herds driven off, and stocks of grain plundered or burnt. Even less complete was the security of the poor man.

This system of hoarding in kind gradually gave place more and more to hoarding of money. Money was safer to

hoard than commodities in bulk, whether living or inanimate, because it was easier to conceal and to protect. It was also a more convenient element of security than "real" property because money is potentially all that money can buy, and in time of stress can therefore more readily be used to meet the crisis than any form of real estate.

A further stage in the evolution of security was reached when the individual possessor of money realised that the anxiety involved in the constant personal protection of his little hoard was perhaps hardly less harassing than the anxiety produced by the fear of future destitution. He therefore found a rich friend whom he could trust and asked him to guard his money for him. In the country this was often done by the paternalistic squire for the countryman, and in the city usually by conspicuously rich men such as goldsmiths. As the system developed, the goldsmith found that so many friendly demands were being made upon him that he found himself obliged to charge a small fee for guarding the hoards of money confided to his keeping.

As every student of economic history knows, this was the origin of the banking system. The goldsmith soon found that it was more remunerative for him, instead of charging the depositor a small fee for keeping his money safe, to pay the depositor a small fee for permission to make temporary use of the money thus confided to him, on condition that it should always be returnable at so many days' notice.

The individual citizen, with his little savings, might now consider himself, and did consider himself, in a very favourable position. His little hoard, a guarantee of security for the future, was not only itself absolutely safe, but was actually increasing! It was increasing, not only without any labour on his part, but without giving him the least cause for anxiety. No wonder the Eighteenth Century regarded compound interest as an institution of almost divine origin.

From the standpoint of the security of the citizen, the system of savings, excellent as it is, suffers from two defects.¹ In the first place, the individual citizen in whom the gift of foresight is strongly developed is apt to save too much. The worker who receives a wage of fifty or sixty shillings a week cannot well save much if he is to maintain himself and his family in health and strength. Jeremy Bentham was by no means a sentimentalist, and no one has argued against equalitarianism more strongly than he ; but nobody has put more clearly the difficulties of saving for large classes of the population. " So far as ' savings ' are concerned, if, in the case of a very large class, the greatest

¹ The motive of saving, consistent with the principles of citizenship, is not abstinence for the sake of abstinence. The community would be benefited by greater and greater consumption of every commodity that is not socially harmful. Doleful estimates are sometimes made of the available foodstuff of the world, and the conclusion drawn that in a very short time it will be insufficient to ensure the survival of the human race. But such prophecies leave out of account almost entirely the possibilities of the application of chemistry to the problem. And Dr. J. B. S. Haldane is confident that chemistry has an important contribution to make : " Within the next century sugar and starch will be about as cheap as sawdust. Many of our foodstuffs, including the proteins, we shall probably build up from simple sources such as coal and atmospheric nitrogen. I should be inclined to allow 120 years, but not much more, before a completely satisfactory diet can be produced in this way on a commercial scale " (*Dædalus*, p. 38).

It is to be expected also that new sources of stimulation of human energy will become available. A striking example is mentioned by Dr. Haldane. " During the war Embden, the professor of physiology at Frankfort University, discovered that a dose of about 7 grams of acid sodium phosphate increases a man's capacity for prolonged muscular work by about 20 per cent., and probably aids in prolonged mental work. It can be taken over very lengthy periods. A group of coal miners took it for nine months with very great effect on their output. It has no after-effects like those of alcohol. . . . It is possible that it may become as normal a beverage as coffee or tea " (*Dædalus*, pp. 34-35).

efforts of industry fail to afford daily maintenance, still less will they permit of any laying-by for the future. Another class may just be able to meet the daily charges out of the wages of each day's toil ; but there is nothing to put aside, to be used in the purchase of necessities at some future time."¹ Things are certainly better now. The average citizen is able to save something, and the facilities for saving have been increased. The British National Savings Movement shows this.²

¹ *Theory of Legislation*, Oxford edition, 1914, I., p. 169.

² The British National Savings Movement, originally inaugurated as a means of tapping the reservoir of small investment during war time, was found in practice to have so beneficial an effect in encouraging thrift among large numbers of people as to justify its continuance in time of peace for that one object. Its continued success seems to have been due to two main factors : firstly, the concentration of a large part of its propaganda on the utilisation of already existing local machinery, such as schools, workshops, country villages, etc., rather than the isolated individual ; and, secondly, the extremely effective instrument of saving, the Savings Certificate. The backbone of the movement is the local Savings Association, of which more than 19,000 are in existence. These bodies are run on a purely voluntary basis, the executive having the advantage in such matters as accountancy of the individual members of a small corps of expert officials of the National Savings Committee, who visit their areas from time to time.

The national system of organisation of the Association is of much interest. The administrative unit is the local committee. Conferences of local workers are held annually, when representatives are elected to serve on the National Committee and to attend the annual assembly. The Savings Association allows its members special facilities for the purchase by instalments of National Savings Certificates.

The characteristic features of the National Savings Certificate, well known to everybody in England, may for the benefit of others be briefly described. Each certificate costs 16s., and interest on it is paid not annually, but monthly, and is automatically added to capital, tax free. Though the certificate is payable within a few days of demand, interest accrues in a manner which puts a premium on its being held for the full ten years of its life. If the certificate is

The second defect of the savings system, from the standpoint of the provision of security, is even more serious. Savings, from their very nature, though they accumulate surely, accumulate slowly. And it is usually difficult for the average man, at the outset of his life's work, and with a growing family, to save at all in his youth. Now the contingencies, emergencies, and dangers against which security is sought are by no means confined to old age. Many of them may occur in youth and in maturity, and the ordinary methods of saving constitute no sovereign guarantee against them. What is therefore needed is some system which will supply adequate provision to guarantee a minimum of security during all emergencies. The system which supplies this guarantee is insurance.

Insurance in the modern world is the great refuge of all classes in the search for security. The citizen of every grade seeks to insure himself to "obtain cover" (to use the official expression of the insurance companies) against the emergencies of life, in order that he may devote himself, with a mind unharassed, to the tasks of his daily round.

In the business and professional classes insurance of all kinds is daily becoming more widespread. A man insures his life against death, his body against disease and disability, himself and his family against accidents, his house and furniture against fire and burglary, his business against dishonest employees ("fidelity" and a variety of other contingencies), his crops against inclement weather, his holiday against rain. Few are the possible emergencies that cannot be covered by insurance.

thus held for ten years, the average rate of interest works out at about 5 per cent. compound. The striking feature, it will be observed, of this system is that it is definitely a form of community saving by citizens. The denomination of each unit brings it within the reach of all, and to all alike the encouragement of the local associations is given. The whole Association is democratically organised, and the individual member of the local committee can bring his views to the attention of the National Committee.

Among the workers, too, insurance has been growing in popularity. But for the worker voluntary insurance is more difficult than for the man of greater financial means, simply because it is more difficult for him to spare from his earnings the necessary premiums. And it is precisely for the worker that insurance is most necessary; for it is he who suffers most from the effects of insecurity, insecurity in the present and insecurity in the future. The worker experiences more emergencies in life than the man of more ample means. The high-powered motor car is able to take normal hills without changing gear. But the small car, with no reserve, is in difficulty as soon as a comparatively trifling ascent presents itself. Similarly, inequalities in the path of life which would be hardly noticeable to a man with some financial reserve become serious emergencies to the man who constantly lives on a narrow margin. For the industrial worker, the "social risks" against which security is sought include unemployment, industrial accidents, industrial diseases, non-industrial accidents, ill-health, disablement, maternity, old-age, and death.

In certain countries insurance against some of these "social risks" is already organised on a State system. For example, invalidity, old age, and premature death have formed the subject of legislation and State systems of insurance in twenty-six countries.¹ These are all serious risks to the worker. When old age makes him wholly or partially incapable of work, he probably has no private financial resources, and in the absence of any system of old age pensions he must apply for poor relief.

Invalidity threatens the worker with the same danger as

¹ Australia, Austria, Belgium, Bulgaria, Canada (four provinces), Czechoslovakia, Denmark, France, Germany, Great Britain, Greece, Irish Free State, Italy, Luxembourg, Netherlands, Newfoundland, New Zealand, Norway, Portugal, Roumania, Russia, Kingdom of the Serbs, Croats and Slovenes, Spain, Sweden, Switzerland (Canton of Glaris), and Uruguay.

old age, but prematurely, and frequently at a time when his children are young and he has still to support them.

The injury which it causes is at first sight individual rather than social. It does not appear to involve the same catastrophic dangers to the community as unemployment. But on closer inspection it is seen to be formidable, not only to the individual citizen but also to the State as a whole. It is not an epidemic disease which can be eradicated, but an endemic malaise which perpetuates itself.

A large number of countries have also adopted systems of insurance against sickness, which is a standing menace to every worker and his family. Compulsory sickness insurance, or health insurance, as it is usually illogically called, is in force in nineteen countries.¹ In certain other countries there exist active private institutions for sickness insurance, but there is a general tendency to regard the risk of sickness as a social risk against which the State should encourage its citizens to seek protection.

Systems of insurance are also in force in a considerable number of countries, against unemployment, against industrial accidents, against industrial diseases, and in connection with maternity.

In many of these countries a desire is increasingly felt to reconstitute the various systems on a uniform basis. It is recalled that the fundamental object of social insurance is to enable the insured workman and his family to maintain a reasonable standard of living during periods of economic stress. From the psychological standpoint it seeks to free the worker and his family from the burden of the pervading fear that the economic emergencies of his life will drive them into destitution. It is certain that so long as the workman and his family dwell under the shadow of this fear, industry

¹ Austria, Bulgaria, Czechoslovakia, Esthonia, Germany, Great Britain, Greece, Hungary, Irish Free State, Japan, Latvia, Luxembourg, Norway, Poland, Portugal, Roumania, Kingdom of the Serbs, Croats, and Slovenes, Russia, and Switzerland (three cantons).

cannot hope to secure the most efficient and whole-hearted work. But if this dread of destitution be removed, as it can be removed, by a comprehensive system of social insurance, the citizen will be able to give himself with a single mind not only to his daily work but to all the social duties which devolve on him as a citizen.

It is with this in view that in England various appeals have recently been made for a unification of social insurance. One advocate calls for a scheme of "Insurance for Everybody and Everything," while another recommends an equally completely inclusive "All-In" system.

It would appear certain that some unification in the field of social insurance is necessary. At present, in Great Britain and in certain other countries in which various forms of compulsory State-aided social insurance are in force, there is a lack of uniformity both in the rate of benefit provided and in the machinery for the administration of the systems. In the case of Great Britain, which may be taken as typical, the administration of insurance is entrusted to an amazing variety of organisations. Unemployment insurance is carried on by employment exchanges, trade union and other recognised associations. Health insurance is administered by "approved" societies, consisting of friendly societies, trade unions, collecting societies, industrial insurance companies, employers' funds, and by the fund for deposit contributors. Workmen's compensation is administered by insurance companies, employers' mutual assurance societies and establishment funds. The administration of old age pensions is undertaken by the Customs and Excise Department, while payments are made by the Post Office. Burial insurance is organised by insurance companies, collecting societies, and friendly societies. Finally, to supplement all this and to fill up the gaps left by the various partial forms of insurance comes the Poor Law.

Lack of uniformity is equally characteristic of the scales of benefits in operation. In the case of unemployment

insurance, the unemployed workman receives 17s. per week, plus 7s. for his wife, if dependent, and 2s. for each dependent child. Less generous are the health insurance benefits. The basic rate for the worker himself is 15s. per week, but no additional provision is made for dependents. In the case of industrial accidents, benefits vary up to a maximum of about 30s. per week, but no specific allowances are made for dependents.

Of this diversity, not only in scale of benefit but also in administration, the explanation is due to the fact that our social legislation has, quite rightly, been undertaken largely experimentally, part by part. This is emphasised by a recent report of the Inter-Departmental Committee on Public Assistance Administration (Cmd. 2011, 1924). They write: "The various schemes as they stand to-day have grown up piecemeal in a long period of years and plainly bear the marks of their historical development . . . the various services have for the most part been instituted at different times and have developed on a number of independent lines. They have been designed to provide for special contingencies as the need or demand for them became apparent, frequently by different methods and in different measure; different principles have entered into the conception of services providing for closely related forms of need, and different forms of administrative machinery have been set up for services broadly similar in purpose."

It would now appear that the results obtained by this series of legislative measures are sufficiently definite to justify an attempt to substitute for the existing mosaic a unified system of social insurance, to cover all social risks on logical and consistent lines.

The purpose of social insurance is to give security to the citizen, and to protect him against the menace of the hydra-headed "social risks." The ordinary citizen who earns his living by the work of his hands or his brain has to spend practically all his limited earnings on the normal needs of

himself and his family. Unless he is insured, he lives in a state of perpetual uncertainty, which undermines his freedom of mind, the guarantee of good work, the organisation of production, and in the long run the well-being of society.

While security is much, it is, of course, not all. Security as an ideal in industry has been trenchantly criticised by Mr. A. E. Zimmern, mainly on the ground that it does not allow for the element of initiative in human nature. Mr. Zimmern maintains that the ideal of security for the industrial worker embodies the principles of the feudal system. Feudalism involved a system of contract between the lord and the labourer by which the lord and master ran the risks, set on foot the enterprise (mainly military) and enjoyed the spoils, while the labourer stuck to his work and received security and protection in exchange. "Feudalism broke down," says Mr. Zimmern, "because it involved too irksome a dependence, because it was found to be incompatible with the personal independence which is the birthright of a modern man."¹

Now all this is perfectly true, but it does not go to the root of the matter. It is true that the feudal system collapsed because it was not compatible with personal independence. But is the ideal of security through saving and insurance incompatible with personal independence? By no means. On the contrary, it is a device to enable the individual to guard to the utmost his personal independence and liberty of action. What is the purpose of saving? Primarily to enable a man to remain independent of charity or government assistance in his old age. And what is the purpose of insurance? Primarily to secure independence on the part of a man and his family of unforeseen events. A business man who takes out insurance policies on his own life, on the "fidelity" of his clerks, to cover his office against the risk of fire and his ships against the risk of shipwreck

¹ *Nationality and Government*, p. 195.

does not lose any of his independence or initiative by thus seeking security. When the Canadian farmer insures against hail, against drought, against lightning, and against almost every incalculable eventuality, the result is that he has tranquillity of spirit to launch into new adventures and new initiatives.

From this standpoint social insurance does not differ in its effects on citizenship from ordinary insurance. In most social insurance schemes, contributions are made not only by the individual primarily concerned, but also by the employer and the State. But in all cases the individual himself contributes : insurance is not Poor Law assistance. And the main aim of social insurance is to secure that the individual citizen, whatever the blows of ill-fortune, should always retain his independence as an individual and should never relapse into one of an indefinite mass supported by the Poor Law.

Social insurance, we have said, is important for the citizen because it helps to enable him to keep a tranquil mind and thus suffice for the duties of his place in society. But from the wider standpoint of social progress as a whole, it is important that the development of social insurance should go hand in hand with a systematic effort to minimise the emergencies and contingencies which it is intended to meet.

§ 9. The Stimulation of Consumption.—Given the financial means to obtain at least a part of the goods he wants to satisfy his needs and desires, the chief interest of the consumer is to obtain them with the least possible trouble. It is this interest of the consumer that the producer, or more generally the distributor, has known how to exploit by means of advertisement. In its origin, the advertisement is an announcement by the producer that he has goods to sell, or an announcement by the consumer that he wants to buy goods. A glance through the pages of any newspaper will show that in practice in the modern world

it is the producer and not the consumer who advertises. The consumer waits till the producer brings to his attention the goods he wants. And yet this is not really what happens. The consumer who really wants an article—the woman who wants a new frock or the man who wants a new pair of shoes—does not wait till an advertisement appears. He simply goes to a shop and makes the best choice he can. Paradoxically enough, the producer's advertisement appeals, in general, only to the consumer who does not really want a particular article at all. This is the consumer who has a certain amount of money to spend and has only the vaguest idea of what he will spend it on. That such consumers are numerous would seem to be indicated by the enormous extent and success of modern advertising. People's wants are usually indeterminate: it requires the stimulus of an advertisement to incite them to decide in favour of satisfying one particular desire rather than another. The chief purpose of advertising is therefore the stimulation of the will to buy.

Now, at first sight it seems strange, when we remember the inadequacy of the financial means of the great majority of people to give satisfaction even to their rudimentary wants, that the will to buy should require any stimulation at all. The fact, however, is that often the will to buy requires to be externally stimulated because it is in a state of hesitation between two or more possible purchases. It is this state of hesitation, of unstable equilibrium, that has to be overcome by the advertisement.

It is therefore a fundamental principle of the art of advertising that the advertisement must be as striking and as persuasive as possible. That this art has made extraordinary progress must be admitted by anyone who compares, say, the *Saturday Evening Post* (New York) with any periodical of twenty years ago. The advertisement must be, by reason of its colour scheme, contrast effect, size, or even its beauty, as effective as possible in attracting attention and impressing the memory.

The second function of the advertisement is to operate through suggestion, to persuade the prospective consumer to buy. What is suggestion? It has been well defined as "a process by which an individual's beliefs, ideas, or opinions may be directed, modified, and controlled, independently of logical or rational grounds, and in such a way that the individual will act on such beliefs and opinions with at least as much certainty as he would act on beliefs and opinions for which he had logical grounds."¹ The aim of advertisement is to convey, directly or indirectly, the suggestion to the buyer that the article advertised is the one which suits his needs better than any other article. The advertisement must also suggest to the consumer who has no immediate intention of buying anything in particular not only that the article should be bought, but that the present is a particularly opportune moment to buy it. This is in part the explanation of the familiar, and at first sight paradoxical, phenomenon that there is always a rush to buy when prices are rising and a hesitation to buy when prices are falling. When prices are rising the advertiser strongly emphasises that "prices will be dearer," and the consumer, even if he has no immediate need of the goods, will buy them in order to avoid paying more later on. On the other hand, when prices are falling, the consumer postpones buying in the hope that they will fall still further.

If our touchstone—*influence on citizenship*—be applied to advertising, what will be the result? Advertising undoubtedly performs a useful social function inasmuch as it brings to the attention of the consumer the articles which various producers have to sell, and thus helps him to make a rational choice. But its influence becomes positively harmful when, as frequently happens, by a process of reiteration and suggestion, it persuades the consumer to buy things which he does not really want. It may be true that the consumer's systems of wants require education; but

¹ J. Drever, *The Psychology of Industry*, p. 111.

the best agency to entrust with this delicate task is not advertisement, which naturally must always be *ex parte*. It is also evident that the tendency of advertisement to accentuate the rapidity of a rise in prices, and thus to contribute to render more severe economic cycles of alternating boom and slump is socially disadvantageous.

§ 10. **The Consumer's Grievances.**—The consumer has a legitimate grievance against advertisements when, in addition to telling him where he may obtain a thing he wants to buy, they bring pressure to bear on him, psychologically, to buy things he does not need. This is doubly annoying to the consumer. In the first place, he has the unpleasant suspicion that he is being made to buy things he does not want; and in the second place, he knows for a certainty that the price he pays is disproportionately raised owing to the necessity of paying for advertising it.

The consumer also has a grievance, legitimate or illegitimate, against the middleman. If the consumer has had no training in economics and is not very reflective, he will say outright that the middleman is a parasite and should be abolished. But if he has given any study or reflection to the question, he will see that the middleman performs an essential function in the industrial community, and that without him the buyer and seller could not really come into contact at all.

The consumer is on surer ground, however, when he maintains, not that the middleman is useless, but that he charges the community too much for the services he renders. "It is a weakness in our economic machinery," writes Mr. Hartley Withers, "that dealers and brokers seem, on the whole, to be more prosperous than the actual producer of the goods that they handle, and that trading towns are more wealthy than the purely industrial or producing places."¹ There certainly seems to be something wrong when those who

¹ *Poverty and Waste*, p. 119.

handle goods and pass them on receive more from the community for their services than those who make them.

Another grievance of the consumer is directed against the action of trusts and other combinations that seek to establish monopolies. The natural result of the action of trusts is, by stamping out competition, to raise the price of the product unduly. The monopolist runs counter to the principles of good business, if he sells a smaller quantity of goods at a higher price rather than a larger quantity at a lower.

Finally, the consumer, or at any rate the reflective consumer, complains that the producer is apt to exploit natural resources recklessly and wastefully in order to obtain large immediate profits. On a short view, this recklessness does not affect the consumer adversely, inasmuch as it often leads to low prices, but it certainly does affect the interests of the consumer of the future. It is for this reason that many governments, representing the interests of the consumers, restrict the exploitation of natural resources. Fishing, and the hunting of game, for example, are permitted only within certain periods, in order to prevent the extermination of the species. Certain restrictions are placed on the wholesale cutting down of timber, or measures are taken to afforest lands that have been completely denuded. In the United States much is being done by the conservation bureaux to prevent the wasteful exploitation of water power. All this is in the interests of the consumer of the future.

§ 11. The Protection of the Consumer.—If, however, it is true that the consumers have grievances against the community or against particular sections of it, it is also true that they have various means of protecting themselves. If, for instance, they convince themselves that the prices of articles are being unduly raised by those responsible for production, they have various means of recourse.

In the first place, they may diminish their purchases or even for a time cease to purchase altogether. They may

declare a "consumers' strike." This was what happened in the United States in 1920, when clothing became so expensive that the consumers formed a movement to wear overalls until the price of clothes was lowered. The consumers' strike is not usually so picturesque as this. Usually the consumer contents himself with grumbling at high prices and continuing to buy, though in reduced quantities.

This decrease in effective demand is the second main means of recourse of the consumer against unduly high prices. It is a reaction which is largely unconscious, but it is none the less effective. For it is a fundamental principle of all good business that it is more profitable to produce or to sell larger quantities of products at a small profit than small quantities at a big profit. A slackening in the demand for an article, therefore, always suggests to the seller the desirability of reducing the price with a view to stimulating the demand. When the consumers buy less they automatically bring pressure to bear on the producer to lower the price. The demand for most kinds of articles is highly elastic, and this is the consumer's chief weapon. The consumer's weakness is usually that he is unaware that he is bringing the pressure to bear. When the village washerwoman ceases to buy a particular kind of starch because it is too dear, or the rural postman reduces his consumption of tobacco, they are unaware that thousands of other isolated individuals are doing the same thing. In the end the producer is influenced, but he would be influenced much more directly and rapidly if the consumers were organised.

In some few cases organisations of consumers have, indeed, been established. There is in Great Britain, for instance, a National Association of Railway Travellers, an organisation for mutual defence of consumers of railway transportation. There are also Ratepayers' Associations, Telephone Users' Associations, Season Ticket Holders' Associations, and so forth. All of these exist to defend the interests of consumers. But they are all small associations,

covering limited groups of consumers, and their influence is probably not very great.

More important, from the standpoint of the maintenance of the interests of the citizens as consumers, are the provisions which exist for the appointment on various official bodies of representatives of the consuming public. Thus, the National Food Council established in England in 1925 includes representatives of the ordinary consumer, and consumers are also represented on the National Railways Board. During the war the Ministry of Food set up a Consumers' Council which, though only advisory, inspired popular confidence. In France and Germany the consumers are directly represented on the National Economic Council and the Federal Economic Council. And it should not be forgotten that, in theory at least, the representation of the people in Parliament is a representation of the citizen as consumer rather than the citizen as producer. Occasionally, indeed, Parliament intervenes directly to protect the consumer, as in 1919-1921 in many countries by means of Profiteering Acts and similar measures.

The most important direct form of consumers' protection, however, is that provided by consumers' co-operative societies. In its origin the co-operative movement occupied itself with somewhat vague and idealistic visions, but in the hands of the historical society of Rochdale weavers which, in 1844, became a model for the whole co-operative movement, the ideals of co-operation assumed a very definite and practical form. The general principles of organisation adopted by this early Society are now to be found reproduced in a very large number of countries.

The leading features of the system are extremely simple. The members of the local co-operative society are both the customers and the owners of their own retail shop or shops. Membership of this society is open to anyone on payment of a small capital subscription. All members have the right to vote in the election of the Committee of Management,

and on any other matters submitted at general meetings. The Committee of Management are usually ordinary members of the society, but give only a small part of their time to the work of the society and receive for this nominal fees. The manager of the shop and his assistants, on the other hand, are whole-time paid officials responsible to the Committee of Management. The prices charged in the shop are usually about the same as those charged by other retailers, and the shops are often, but not always, open to purchase by anyone, whether a member of the society or not. The benefit of membership in the society comes from payment to members of a dividend in proportion to the value of their purchases. The payment of this dividend naturally helps to gain members for the society and to ensure their loyalty to the shop once they are members.

An early and logical development of the co-operative movement was to extend its operations to the wholesale trade. It soon became clear that if the local retail co-operative shop bought its goods in small quantities from the producers, it would not avoid the middleman's costs, which are so onerous in retail trade. Various retail co-operative societies are therefore organised in most countries into federations forming a central wholesale society which they own and manage on the same kind of principle as their own shops are owned and managed by their members.

The figures of the business done by the wholesale co-operative societies are very striking. The English Co-operative Wholesale Society, for instance, sells annually to its membership of 1200 societies £105,000,000 worth of goods. The productive activities of the society are very numerous, and it owns tea estates in Ceylon, oil-yielding properties in West Africa, a tallow factory in Sydney, purchasing depots in a number of Continental towns and in America, and a fleet of ships to provide for the transport of its goods. But perhaps the most important recent development of British co-operation is the banking system that has

been organised by the Co-operative Wholesale Society. This department kept, in 1921, current accounts for 1000 co-operative societies, nearly 5000 trade union branches and friendly societies, and 1000 working men's clubs and other mutual organisations.

An important aspect of the work of the co-operative societies, from the standpoint of the development of citizenship, consists in their social and educative activities. Most co-operative societies make grants for educational and social work. Many societies now maintain holiday homes where members can spend inexpensive holidays. There are also co-operative convalescent homes, and in many places arrangements are also made with hospitals for special facilities to be granted to co-operative members. In many cases also there is a co-operative building known as a "social institute" in which centre all sorts of associations and clubs, "guilds" for women, for men, for young persons, for children, usually with branches meeting at the outlying stores, debating societies, literary societies, choral societies, drill and dancing classes, chess societies, photographic societies, football and cricket clubs, field clubs, rambling clubs, cycle clubs, "summer schools" and "holiday fellowships" for home and foreign travel.

The methods of operation of the consumers' co-operative societies in various countries vary to some extent from country to country, and even from area to area, but in general what is true of the English societies is also true of those in other countries.

It was estimated by Mrs. Sidney Webb in 1921 that the total co-operative membership of the world was then probably 40,000,000, representing one-twelfth, or possibly one-tenth, of all the families on the face of the globe. It is clear, therefore, that the consumer, through the co-operative societies, has done more than experiment in the protection of his own interests.

§ 12. Consumption as Social.—It is important, from

the standpoint of citizenship, to remember that the consumer is always, whether or not he is organised in one or other of the societies which have been described, a member of a group. There is a tendency sometimes to imagine that while production is "social," consumption is "individual" or "unsocial." This is quite fallacious. As a rare exception a consumer may sometimes be found, such as the "secret drinker," who consumes as an isolated and clandestine atomic unit. But, in general, consumption is a group activity. In examining the consumption of food, for instance, it is the "family budget," or the "family market basket" that is taken into account; the unit in consumption is not considered to be the single individual, but the family. And when we speak of a "standard of life," we are referring to the standard of consumption, not of any particular person, but of a particular group of persons, as when we talk of the "miners' standard of life," or the "suburban standard of life," or of a whole nation, as when we speak of the "standard of life in Germany." That the standard of consumption is a group or sometimes a national standard is clearly indicated by the table quoted above, showing the difference in the quantities of foodstuffs consumed in different countries. The individual Frenchman does not explicitly choose to eat coffee and rolls for breakfast, and the individual Briton tea and bacon. They simply accept this diet as traditional and conventional. Changes may, of course, slowly take place in group or national tastes, and the group or national taste as it exists at any given time may be regarded as partly a group inheritance and partly a group acquisition of habitual tendencies of consumption.

In matters such as clothing and housing, also, consumption is essentially group consumption. Why is the stone-built tenement the usual lodging in Scotland, and the brick-built house the normal dwelling in England? The climate may have something to do with it, and also the kind of building material most readily obtainable. But more

probably the difference is to be attributed rather to custom, the tradition of a particular kind of group consumption. Again, how explain the prevalence of wooden houses in Sweden and Switzerland, where the climate offers great extremes of cold and heat? Partly, no doubt, owing to the abundance of wood, but in both countries building stone is also plentiful and in both the general standard of living is high, so that if any group demand existed for stone or brick houses, it could be satisfied. But group consumption, this is the fact, demands houses of wood.

In the case of dress, a rare individual, more courageous than her fellows, may defy convention and dress as she likes, and not as fashion dictates, but "fashion" is the voice of the group and in general the individual obeys. An interesting sidelight on the development of internationalism is the extent to which the consuming unit in the case of women's dress has ceased to be a small local group and has become practically the whole world. Gone are the days when the group was the Scottish clan with its tartan, the Swiss canton, the Dutch fishing village or the valleys of Dalecarlia and Västcrås, each with its tasteful and distinctive group costume and head-dress. Now Paris models are taken to all the capitals of Europe and America, and "copied" in innumerable reproductions, so that in a surprisingly short time the clerk's wife in London or Vienna, the farmer's daughter in the Middle West or in Denmark, the servant girl in Rome or Buenos Ayres, is clad in a colorable imitation of the latest Paris fashions. Does group consumption in any other field reach such extremes?

An interesting suggestion has been made by Mr. Delisle Burns that "in modern industrial countries women are generally consumers and men are generally producers."¹ To adopt this view, however, would be to accept the semblance for the reality. It is quite true that to a superficial view, the man, the worker, seems to "produce," and woman,

¹ *Industry and Civilisation*, p. 202.

the stay-at-home, seems to "consume." But if we consider the great majority of the citizens, namely, the industrial workers, we find three salient facts: In the first place, the average working-man's wife with a young family does the same amount of work as is done in a middle-class family by two or three domestic servants. Is the working-man's wife to be called a "consumer" and the domestic servants "producers"? In the second place, the number of women who, in addition to domestic duties, do a full day's work as "producers" side by side with men is already large, and is probably increasing. And, finally, while it is true that in the working-class household the woman is generally in charge of the household expenditure, her consumption in this respect is largely vicarious consumption. In other words, she selects the articles that are to be consumed by the whole family, but she herself probably consumes less than her proper share. The grand arbiter of consumption is still the man, the "producer."

§ 13. Leisure: the Consumption of Spare Time.—

In our analysis of the functions of the citizen as consumer, we have not yet referred to the important question of the consumption of spare time or leisure. This is clearly consumption of a very significant kind. And it is in this respect that waste in consumption is most extensive and has the worst social consequences. For the first time in the history of the world leisure now has a real meaning. This is partly because on the one hand there is no longer in any country a numerous idle class, and on the other hand there is no longer in any country any wide section of the community completely deprived of spare time. For an idle class leisure has no real meaning. They know not leisure who nought but leisure know. On the other hand, leisure does not exist for people who work 14 hours a day.

Under the standard conditions of the modern industrial order the normal working day is of 8 hours, and the industrial worker therefore does have leisure to enjoy. And the

enjoyment of leisure time is increased by the movement which, in recent years, has become more and more general to provide annual holidays with pay for all classes of workers. Sometimes the grant of a holiday with pay is based on legislation, but more often it is the result of collective agreements between the employers and the workers in particular industries. Since the war, legislation providing for holidays with pay to large groups of wage-earners has been adopted in Austria, Finland, Latvia, Poland, and Soviet Russia, and similar, though not such extensive, legislation has been put into force in Czechoslovakia, Denmark, Iceland, Italy, Luxemburg, Spain, and Switzerland. In such countries as Great Britain the workers in many industries enjoy a system of paid holidays as a result of collective agreements, while in the United States, although collective agreements are few, private enterprises are rapidly adopting various types of vacation plans, not mainly as a reward for faithful service, but rather as good business policy.

Practically all the laws on the subject provide that the worker, to be entitled to a holiday, must have a certain period of service to his credit, as a rule with the same employer. It appears reasonable that the employer should not be compelled to pay a worker during his holiday if the employer has not benefited by the worker's services for a certain period. In practice, the period of service fixed in legislation is usually either six months or one year.

The length of the holiday allowed varies with the class of workers entitled to it and with the length of their period of service. The usual duration of the holiday is either one week or two weeks. In certain countries, however, a longer period is prescribed for young persons, intellectual workers, and those employed in dangerous or unhealthy trades.¹

It is worth noting that in some countries the laws definitely forbid workers to take paid work during their

¹ Full details may be found in *Vacations for Industrial Workers*, by Charles M. Mills, New York, 1927.

holidays. This is obviously logical, as the object of the holiday is to allow the worker to rest and to restore his health and capacity for work. The holiday has, in fact, a psychological basis, and the assumption is not only that this unbroken period of leisure will be good for the worker as a citizen, but that it will also enable him to return to his work as a more efficient member of the realm of productive industry.

The movement in favour of the 8-hour day and of paid holidays has had as one of its mainsprings the desire to secure increased leisure for the workers.

In many countries an acute problem arose after the introduction of the short working day, owing to the fact that the workers, on the rapid change from a 10- or 12-hour day to an 8-hour day, found it difficult to adjust their manner of living to shorter working hours and to making the best use of their newly-acquired leisure.

It is clear that the good utilisation of workers' leisure is as much in the general interests of society as in the individual interests of the workers themselves, and an improvement in the utilisation of workers' leisure will almost necessarily result in a general raising of the standard of civilisation.

In some countries great progress has already been made in this direction. In the development of workers' gardens, for example, an enquiry made in France in 1923 by the Ministry of Labour showed that of 160,000 workers' gardens under cultivation in 1922 with regard to which information was available, more than 80 per cent. had been created since 1919, the year in which the 8-hour day was introduced in France. As an example of the extent to which workers have been successful in raising poultry, figures may be given for Vienna. There an enquiry showed that the area of gardens under cultivation increased from 1700 hectares in 1920 to 2400 hectares in 1922. The production of vegetables increased from 60 tons to 240 tons, the number of litres of milk from 75,000 to 80,000. In 1922, 28,000 poultry and

20,000,000 eggs were produced, as against 20,000 and 12,000,000 respectively for 1920.

The workers' education movement as a means for the utilisation of spare time has also recently strongly developed in a large number of countries. In Great Britain this movement has been in existence for many years, and is constantly increasing in importance. The desire to promote the education of the workers has not come from the trade unions alone, or even primarily from them, and at the present time provision made for workers' education in Great Britain is of five kinds. In the first place, there is the Workers' Educational Association, whose activities cover a wide field, and whose organisation consists of working-class and educational bodies and individual members. In the second place, there are special colleges organised and maintained by trade unions with the definite object of providing education and training for future trade union leaders. In the third place, there are colleges founded specially to give education to the workers, but without any definite partisan aim. Fourthly, the Adult School Movement and various settlements in London and other large cities undertake educational work as a part of their general social activities. Finally, the universities should be mentioned. They undertake in many cases the organisation of schools of social study and training, and vacation courses which provide education for the workers.

The Workers' Educational Association remains, however, the most important of all the individual associations dealing with this matter. As an example of its growth, it may be mentioned that in 1906 the number of branches was 13, whereas in 1920 the number of branches was 277; and whereas in 1906 the number of individual members was 2612, in 1920 this number had grown to 20,703. In the classes organised by the Workers' Educational Association the list of subjects studied is extremely diverse. The following list, taken from a recent programme, illustrates this :

Trade union history and problems, co-operative history and problems, industrial history, political history, history of social movements, problems of reconstruction, industrial administration, local government, economic theory, political theory, international problems, psychology, biology, social psychology, sociology, philosophy, literature, music, and art.

As an example of educational activity of a somewhat different kind, reference may be made to the development of vocational education and training in Japan. As early as 1890 the Japanese Government began to devote attention to this question and a great development has recently taken place in the organisation of technical and vocational education.

The two outstanding aims of the technical continuation schools are: (a) to give vocational training; and (b) to provide the education essential to good citizenship for young people who are unable to enter the secondary schools and are obliged to take up some trade. It is intended that vocational continuation schools should be established in all cities, towns, and villages throughout the entire country. The vocational training courses are divided into two periods: the primary course (Zen-ki) and the secondary course (Ko-ki). The primary course lasts two years; pupils, on admission, must have completed the six-year course of the general elementary schools (Jingo-Sho-Gakko). Candidates for the secondary course must either (a) have graduated from the general secondary schools (Koto-Sho-Gakko), which provide a two-year course following on the elementary school course; or (b) have completed the primary course of the continuation schools. The secondary course generally lasts two years for industrial or commercial training, and for training in agriculture or fishery three years for boys and two for girls. In urban districts, consequently, the students normally complete their secondary courses of vocational training at the age of 17.

The continuation school system has made considerable

progress of recent years. Since 1912 the number of schools has more than doubled, the number of students has increased more than four-fold, and the amount of money spent more than thirteen times.

The total number of the continuation schools in Japan is 14,953 ; this means that 90 per cent. of the cities, towns, and villages have already provided some facilities for vocational training. The most numerous are the agricultural schools, which number 13,000. The next in order of numbers are the commercial schools, followed by combined agricultural and commercial schools, then the fishery and industrial schools.

These are merely examples of the measures that are being taken, officially or unofficially, in various countries, to facilitate the use of spare time by the workers. It should be emphasised, however, that the value of these schemes resides, in the last resort, in the extent to which they stimulate the workers to a free exercise of their individuality in citizenship. The conditions of the modern industrial order are such that, during working hours, the workers are necessarily more and more subjected to a discipline that is rigid and inelastic. It is all the more necessary, therefore, in view of the importance of ensuring that the mechanisation of production should not result in the mechanisation of consumption, that the worker, during his hours of leisure, should retain the completest possible liberty of action. The value of all institutions, official and unofficial, which contribute to facilitate the use of the spare time of the workers must be judged by the extent to which they assist in the free and untrammelled development of citizenship.

One great value of leisure, from the psychological standpoint, is that instincts and impulses which are baulked or suppressed during hours of work can be given free expression during spare time. The conditions of modern industry are such that rigid discipline is necessary, and the free

expression of certain instincts and impulses is rendered impossible. In leisure time, however, these instincts can be given free play, in sports and games and in many other ways. Leisure hours enable people to satisfy at least in make-believe the common desire to be several selves at the same time, of which William James gave the classical description.

It is in "spare time," finally, that the citizen has opportunity for the enjoyment and the exercise of the social activities of the family. The importance of family life from the standpoint of citizenship is often recognised only when its amenities are absent. "Those who are acquainted with Anglo-Indian life are quickly made sensible of the impoverishment of a society bereft of old persons and children, and composed exclusively of efficient men and women in the full tide of vigour. Not only is the wholesome refreshment and piety which comes from the combining of different generations in the same family temporarily snapped; but the little adjustments of temper and bearing which arise out of the communion of the aged, the middle-aged, and the young are lost as well."¹

Aristotle could say that "leisure is necessary, both for the attainment of virtue and for political action,"² but in the modern world we believe that the greatest advantage of leisure is that it enables citizenship to develop in the ordinary duties of the home and the neighbourhood. Burke has given memorable expression to this: "To be attached to the subdivision, to love the little platoon we belong to in society, is the first principle, the germ, as it were, of public affections. It is the first link in the series by which we proceed towards a love of our country and mankind. . . . We begin our public affections in our families. No cold relation is a zealous citizen. We pass on to our neighbourhoods, to our habitual provincial connections. These are inns and resting-places

¹ H. A. L. Fisher, *The Common Weal*, p. 55.

² *Politics*, vii. 9, C.

. . . so many images of the great country, in which the heart found something which it could fill.”¹

It is through devotion to small and even fragmentary associations that we learn those lessons of loyalty that are the foundation of all citizenship.

§ 14. **Consumption and Citizenship.**—Consumption, as we have seen, is an important function of citizenship. Too often it is assumed that while the producer has certain moral responsibilities, the consumer has no such duties. Occasionally, indeed, when some particularly scandalous example of wasteful consumption comes to the attention of public opinion, there is an outcry against the standards of consumption of the “rich.” But it is not generally recognised that *all* consumption has a moral aspect, and that *all* classes of the community may be guilty of consumption that is inconsistent with good citizenship. Consumption is not passive reception; it is essentially active, and may be pregnant with good or evil for the community as a whole.

In most modern States, indeed, the law of the land prohibits certain kinds of consumption. In many countries the law does its best to prevent the consumption of noxious drugs and obscene publications, and in some the law goes so far as to condemn the consumption of alcoholic liquors. There is, in fact, general agreement that consumption of drugs and obscene publications is not conducive to good citizenship, and that excessive indulgence in alcohol is equally bad.

But, apart from those things whose consumption can be definitely characterised as inconsistent with good citizenship, there are many which are in a doubtful situation. One of the greatest practical difficulties of life is to choose between goods to be consumed. It is in consumption rather than in production that choice is exercised. Most people, all their

¹ Burke, *Reflections on the French Revolution*, pp. 292-294; *Collected Works*, 1899, Vol. III.

lives, are being confronted by alternative ways of consumption. Only very few people have the financial means to consume all they want. Most people must make a choice between the satisfaction that will be afforded by one or another form of consumption. A simple instance of this choice is seen in the case of the man ordering an *à la carte* dinner, a more complicated one the choice between a yacht and a Rembrandt.

In making these choices a man has to take into account not only the satisfaction which consumption will give him, but also the repercussions of his consumption on the community as a whole. This can only be done in a general way. To attempt to assign definite values to all forms of consumption is as impossible as to assert that all forms of consumption are morally alike. There is a middle course between the subtleties of the casuists of the Middle Ages, who compared the moral utilities of bread and music, and the oversimplicity of the Benthamite who asserted that "pushpin is as good as poetry."

Consumption, we have said, has a significance not only for the individual, but also for the community. It is not only an appetite but a means of self-expression. Civilisation advances by increasing the variety and abundance of its consumption as much as by developing its production.

In the modern industrial world the citizen, as consumer, undoubtedly has much to learn. We occupy ourselves so much with the means of life that we miss the meaning of life itself. This is the criticism of the modern industrial order that Eastern observers most commonly bring. As Lowes Dickenson has put it in his *Letters of John Chinaman*: "Machinery of every kind you can make and use to perfection, but you cannot build a house or write a poem. Still less can you worship or aspire." Or, as an eminent and observant Japanese said to me: "You are so full of the means of life that life itself escapes you." We do fail to realise that the main function of consuming is not to satisfy

wants and satiate appetites, but to express the self. Consumption is not morally good unless it contributes to the development of citizenship. And it is by this touchstone that the good citizen must test all his consumption. Consumption is not passive ; it involves an outgoing of energy, and if this energy is not to be fatally dissipated, all consumption must be subordinate to the architectonic principles of citizenship.

CHAPTER V.

THE CITIZEN AND THE STATE.

§ 1. **The State and Social Institutions.**—Citizenship, in the modern industrial order, involves not only loyalty to the State, but also loyalty to the various social institutions within the State. These social institutions are very diverse. A family, a university, a church, a masonic lodge, a trade union, a social club—all are social institutions. And they are social institutions because each is what MacIver has called “organised forms of social activity created by associations,” or Hetherington and Muirhead, “the embodiment in external form of an end which some group of individuals has proposed to itself.” In the life of citizenship the institution performs two functions. In the first place, it prevents waste by providing some common centre for like activities of the citizens. Within an institution men pursue not only individual ends, but the social ends of the institution. Each institution is a “realm of ends” in which the aspirations of the members converge, coalesce, and mutually contribute to a common realisation. In the second place, it also prevents waste by ensuring continuity in particular fields of social endeavour. An institution possesses a permanence which does not attach to an individual. It involves a crystallisation of social experience and custom which spares each generation the necessity of reconstructing *ab ovo* the foundations of its social life. The rôle that is played by habit in the life of the individual is discharged in the social sphere by the institution.

But in the very performance of this function the institu-

tion may endanger the progress of the citizen and of society itself. New social movements are apt to be restrained and even crushed by the dead hand of social control. A spirit of new life within society may be killed by the greyness of the social theories of the institution. The institution is therefore apt to hold passionately to its past, living on its theories and principles, deaf to the call of new ideas, blind to the appeal of new colours, and unconscious of the stirrings of new life. In such stagnation there is death for the institution, and social death for the citizen. That is why social education is so necessary, to bring home to all citizens, who, after all, constitute the institution, the necessity of that spirit of open-mindedness and adaptability which is the condition of all progress.

The most important thing about an institution is that it embodies a purpose, and that it claims from all its members loyalty to this purpose or system of purposes. The purpose of the family is the rearing and training of the young to be loyal members of the family and good citizens of the State. And the family as an institution claims the loyalty of each and all of its members to this purpose.

The purpose of a university is the education of its members as worthy children of the *Alma Mater* and good citizens of the State. And the university as an institution claims the loyalty of all its members to this purpose.

Again, the purpose of the Church is the spiritual edification of its members and the moral and religious improvement of the world. And the Church as an institution claims the loyalty of all its members to this purpose.

Similarly, the purpose of a trade union is the collective protection of its members and the promotion of their interests in the world of industry. And the trade union as an institution claims the loyalty of its members to this purpose.

The State, above all other institutions, also has its purpose. The increasing tendency to consider that the purpose embodied by the State is more important than the

obligations it imposes is an indication of the changing attitude of the modern world towards the State. T. H. Green's treatise on the State was entitled "The Principles of Political Obligation." The category that we now use is not "obligation" but "purpose." In this change of attitude the psychological foundation of the State becomes prominent. In general terms, the purpose of the State is to unite a group of people usually of the same nationality or inhabiting a clearly-defined geographical area, in order to obtain for them certain elementary conditions of security and welfare. And the State claims from all its members loyalty in co-operating in the realisation of this purpose.

In a rudimentary stage of civilisation, the number of institutions to which a man belongs may be very few. He may belong, for example, in the earliest stage, only to a family group. In such a case his loyalty to this institution cannot come into conflict with loyalty to any other institution. In an advanced community, on the other hand, such as the modern industrial State, a man may be a member of a large number of institutions, and the risk of a conflict of loyalties becomes correspondingly great. It may, of course, be said that, even in the modern industrial order, there is no necessity for a man to be a member of a large number of institutions. Of only two is he compulsorily a member. He must be born into some family and he must be a member of some State.¹ But he is free to decide whether to adhere to a church, to join a trade union or professional organisation, to become a member of a club, to matriculate at an university. If he seeks simplicity of life, he may abstain from membership of all these institutions. But in the modern industrial order pressure is constantly being brought to bear on him to become a member of an increasing number of social institutions. As it is difficult for a workman to avoid joining a trade union, so it is difficult or impossible for a

¹ Even these elementary obligations may in certain exceptional cases not exist.

doctor or lawyer to avoid joining his professional organisations. And a vaguer social pressure may make it almost incumbent on a man to join some lodge, or church, or club.

When a man is a member of a large number of institutions, conflicts may occur between the loyalties to which they lay claim. In general, however, the citizen who is a member of many institutions within the social organism succeeds in avoiding these conflicts of civic loyalty. But how? Mainly because each of the organised social institutions has its own system of rules. The member of an institution is not blindly committed to owe loyalty to his institution in all circumstances. His loyalty is always conditional, and it is conditioned by the rules of the institution made in accordance with its purpose. The rules of the State are embodied in its system of legislation, and each member of the State is presumed to know the laws of the State and owes to the State, under penalty, the duty of conforming to its laws.

The Church has its creed and its articles of membership, and the loyalty of its members is conditioned by this creed and these articles. But the life of every church extends beyond the limits of its constitution and its creed. The spirit of religion can never be confined within the frontiers of law. "The letter killeth, but the spirit giveth life." This is now more and more clearly recognised, and whereas the Church used to enforce loyalty by physical means, as the burning of heretics and imposition on the stool of repentance, it now seeks to secure loyalty by moral pressure.

A trade union, too, has its constitution, its statutes, its rules, to which each member must conform. The union does not have the State's powers of physical constraint to compel obedience. It may, however, bring to bear various effective forms of social pressure, and in the last resort it may expel a member who consistently fails to observe various rules.

Take, again, a limited liability company. Its purposes and constitution must be clearly defined before it will be recognised by the State. Its prospectus must indicate

clearly the objects of the company, the particular form of economic enterprise in which it is engaged, the constitution of the directorate, and the responsibility of the shareholders. Every shareholder and director therefore knows definitely the sphere of operation of the company and the limits within which it claims or may claim his loyalty.

Even a social club, perhaps the vaguest form of association, has its bye-laws, to which every member must conform. The purposes of the club are not perhaps clearly defined, nor the means by which these purposes are to be attained. But it does have a written constitution and, even more important, an unwritten corpus of tradition, by which every member is bound and to which he owes a debt of loyalty.

Every institution, by its system of rules and the disciplinary powers it possesses, defines a general standard below which its members must not fall. But the system of rules also indicates the scope of the field within which the institution may demand the loyalty of its members. And as social institutions are nearly all institutions *within a State*, the likelihood of a conflict of loyalties is reduced. In many cases, indeed, with a view to preventing conflicts of loyalties, the State, as the supreme institution, refuses to recognise and protect a social institution whose rules it has not approved. A trade union, for example, in most industrial countries, has to make its rules conform to certain conditions laid down by the State in legislation. And the same is true of social clubs. Any institution whose rules seemed likely to provoke a conflict of loyalties between itself and the State would, in every modern society, run the risk of suppression.

Just because the primary function of the State is to uphold and preserve the structure and existence of society, it has the right and duty to co-ordinate the various associations and institutions within it. The State is not merely *primus inter pares*. It is an association, but it is more than an association. It co-ordinates and regulates all other

associations. Historically, the attitude adopted by the State to other institutions of the social life has varied greatly. Sometimes it has repressed them ; sometimes it has favoured some and encouraged others ; sometimes it has let them get out of hand and usurp its own proper authority.

The question of the extent to which the State may go in controlling and regulating other associations has long agitated political philosophy. Take, for example, State regulation and control of the family. All States decline to recognise any family duty inconsistent with the interests of or the regulations of the State. And most States exercise some positive control over the family. The constitution of a family unit by marriage must be performed in a way authorised by the State, otherwise the union will not be recognised by the State. And if it is not recognised by the State, the State refuses to accord to the parties or to their offspring some of the protection and benefits which it assures in the case of duly accredited alliances. Whether the State should go further than this in the control and organisation of the family is a moot point. Should the State forbid the marriage of its citizens suffering from certain forms of disease or insanity ? Should it, in case such diseases or insanity occur after marriage, permit the dissolution of the marriage ? Under what conditions should the children be removed from the family and be reared by the State ? All these questions have given rise to acute controversy, and none can be regarded as settled.

Take, again, the question of the right of the State to control voluntary associations. The view has been held that the State should prohibit the formation of all such associations. Thus, the Declaration of the French Revolutionary Assembly of 1791 included as one of its clauses, " the abolition of every kind of corporation formed among citizens of the same State is a fundamental basis of the French Constitution." But in most modern States the right of the citizens to associate freely for all purposes not

inconsistent with the aims of the State is now definitely recognised. "Freedom of association" is considered to be as important by the citizen as the "right to vote." The special value of voluntary associations within the State is to enable the citizens to express spontaneously needs and desires which the State is not fitted to consider officially. A group of citizens, for instance, may decide to found a "British Association for the Advancement of Science," or a "British Institute of Philosophical Studies." In both these cases groups of citizens are doing what the State would not be justified in bending its official energies to accomplish. Other functions may be performed by voluntary associations which should perhaps more properly be undertaken by the State itself. The financing and management of the hospitals, and also of the lifeboats, in Great Britain is undertaken by voluntary associations. It is a question whether such functions do not rather belong to the State itself. An interesting example of a sphere in which the impropriety has been recognised of entrusting work to a voluntary association rather than to the State itself is that of the government of subject peoples. For years the East India Company, in connection with its trading, ruled large areas in India. More recently the Niger Company and the British South Africa Company possessed and exercised in virtue of their charters the rights of government over large areas in Africa. That it is wrong to confer such rights on private associations has now generally been recognised, and the system of mandates developed under the ægis of the League of Nations provides that the exercise of government over undeveloped peoples should be entrusted only to States, and not to voluntary associations, and should be granted to them only as a trust to be carried out under the supervision of the League.

The avoidance of conflict between associations can be secured not only by the clear delimitation of the scope of each association, but by the stringent internal organisation of such associations. In the Middle Ages conflicts between

associations, e.g. between the Church and the State, were frequent, not only because their spheres of action were not clearly defined, but also because their internal organisation was loose. The associations of to-day, on the contrary, generally have clearly-defined fields of action, and their internal organisation is usually systematic and closely knit. In cases where conflicts occur between associations to-day, it is not usually owing to any misunderstanding with regard to the sphere of activity proper to each, but it is due to some difference of interest which, for the time being, and in the particular circumstances, appears fundamental.

Take, for instance, the intense and recurrent conflicts between employers and workers which constitute such a prominent feature of the modern industrial order. It is because industry is a single institution that the opposition between employers and workers can arise at all. Opposition is possible only on a basis of community of interest. No opposition can exist between Martians and men simply because there is no community of interest between them.

If, within the industrial order, we take a particular unit, a factory for example, we shall inevitably find evidence of difference of interests. This difference shows itself in the division of employer and employee, of managerial worker and manual worker, even of worker on time rates and worker on piece rates. And, apart from these cleavages of class or group, there are innumerable petty divergences of interest between individuals within these classes or groups, between the works manager and the sales manager, and between workmen employed on different parts of the same job.

But in spite of all these cleavages of interest and even divergences of loyalty, the community of interest in the factory is deeper than the differences, and the factory holds together as a social fabric and continues to operate as an industrial unit only because of that community of interest. In the modern industrial order both employers and workers are necessary to production, and their co-operation in

production is more fundamental than their opposition. It is only because they both necessarily participate in production that it is possible for them to fall into disputes with regard to methods of production and the division of the product of their joint efforts. Under the conditions of the modern industrial order, capital can produce nothing without labour, and labour can produce nothing without capital. It is because both employers and workers are so intensely conscious of their dependence on one another, of their ultimate community of interest, that their disputes and conflicts with regard to what each conceives to be its rights are so acute.

The conflict between employers and workers is only one of the antagonisms within the economic sphere. The producer of raw materials is in conflict with the manufacturer of raw materials ; the manufacturer is in conflict with the distributor, and the distributor with the consumer. Take a simple illustration. The producer of a raw material such as rubber thinks that the manufacturer is not paying him a fair price for his rubber, so he restricts production and makes the manufacturer pay more for his rubber. The manufacturer of rubber tyres may for a while produce his tyres without raising the price, perhaps involving a dispute with the distributor with regard to intermediate profits and commissions, but in the end he raises the price. The consumer of rubber tyres has to pay more for them, and the cycle of conflict is closed when one and the same individual, who owns a motor car and also shares in a rubber plantation asks himself whether the increased dividend he receives on his shares compensates him for the increased price he pays for his tyres. The economic sphere is honeycombed with conflict. But this antagonism of interest is possible only because all citizens are consumers, and almost all are producers, and their community of interest is greater than all divergences.

§ 2. The State and Industry.—The State is the grouping or association of men which exists for the sake of order,

liberty, and progress. It does not exist primarily for the sake of wealth or religious belief or artistic life. But it may, and usually does, contribute powerfully to assist the associations which have these objects primarily in view. Further, the purpose of the State cannot be said to be the promotion of the "good life" in the Aristotelian sense, though it is the single most important contributor to the realisation of the good life. The "good life" in all its amplitude is the aim of the interrelated community of many associations, of which the State is the head.

The State is related to industry in two main respects. It both governs industry and moralises industry. The extreme *laissez-faire* doctrine of the State would have left industry to live or die by its own efforts without any assistance and without any control. But all modern States have departed from this doctrinaire standpoint, and an extremely important part of the legislative and administrative work of the State relates to industry in its various aspects. A considerable proportion of the Acts passed in any one year will relate to industry, and in most countries there are three or four Ministries to assure the administration of the laws and to look to the relations of the various parties interested in industry. In Great Britain, for instance, there is not only the Board of Trade and the Ministry of Labour, but also the Home Office, responsible for the administration of the Factory Acts, the Ministry of Agriculture, the Ministry of Transport, and the Ministry of Health, all of which are intimately concerned with industrial relations. By this system of legislation and administration the State both governs and moralises industrial relations.

(1) The State governs industry in various ways. In the first place, it provides a safe arena in which industry may develop. The reason why industry has never developed in such a country as Turkey is that the Turkish Government has never taken seriously the duty of providing security for industry. Industry in the modern State is not possible

where legislation does not exist providing for the sanctity of contract, rights to property and to patents, and the punishment of fraud. In the modern industrial State the system of legislation for the protection of industry and trade is extremely wide. Bankruptcy Acts, Trade Mark Acts, Registration of Company Acts, all facilitate trade and industry by establishing rules and regulations according to which business can be carried out. These Acts make it more difficult for the rogue to gain a living, but they make it more easy for the honest man. In this way they contribute directly to the development of good citizenship.

By regulating currency and banking the State also contributes to the development of trade and industry. The creation and inspection of a currency system was one of the earliest fields of State enterprise, because it was so obviously to the advantage of the citizens in all their relations as buyers and sellers. The State takes special action against the counterfeiting of the coinage, and by currency manipulation in times of economic difficulty it seeks to regulate in as easy a flow as possible the life of citizenship.

The relations between the two parties chiefly concerned in industry, namely the workers and the employers, are regulated by legislation applying to hours of work, rates of wages, conditions of safety at work, minimum age for employment, night work, and so on. Such legislation is adopted not exclusively for the benefit of the workers, but in order that industry as a whole may develop on healthy and wholesome lines for all concerned in it.

(2) By these and other measures the State also moralises industrial relations. It might, indeed, be said that all legislation has a moral aspect, inasmuch as all legislation facilitates good citizenship. But this is particularly true of legislation on industry, trade, and labour.

Legislation on currency and banking, by assuring the citizen that he is not liable to be defrauded in the ordinary intercourse of buying and selling by counterfeit coinage, by

assuring him, moreover, that the reasonable profits or gains that he makes as a producer will be secure in the banks, encourages him to persevere in methods which bring a reasonable but honest return, instead of launching out on hazardous but dishonest courses in order to recoup himself for the losses which he has suffered or will suffer owing to the dishonesty of others.

In the field of industrial relations, the laws which we have mentioned moralise the organisation of industry, providing protection for the workers against unscrupulous employers, and at the same time protecting the good employer against unscrupulous competitors. All those engaged in industry, whether employers or workers, want to be good citizens in their industrial relations, and they are grateful for legislation which makes it possible for them to be good citizens without falling a prey to the exploitation of the anti-social elements in the community.¹

The question may perhaps be asked why the function of moralising industry has been assumed by the State instead of by industry itself, or some other association such as the Church. The best answer to this is that both industry and the Church try to do something.

Industry itself, independent of the Church or the State, seeks by collective agreement between the employers and the workers to improve conditions in industry and to make them contribute to the aims of citizenship. In Great Britain, the 8-hour day in industry, with all its tremendous influence on citizenship, has been reached as a result of agreement between the employers and the workers, without the intervention of the Church or the State. Industry also has itself adopted prescriptions relating to safety and health conditions in factories, and on many other matters connected with the welfare of all those engaged in industry. In America, also, it should be noted, in many industries what

¹ On this whole question, see Delisle Burns' *Government and Industry*, to which the above discussion is indebted.

is known as an "ethical code" has been adopted by the industry itself without any extraneous interference.

The Church, too, has done something. Often, indeed, it has not spoken with as clear a voice as might have been wished, but there are signs of a renewed interest of the Church in industrial problems. In America it is commonly believed that the decision to adopt the 8-hour day in the heavy iron and steel industries was influenced by the campaign undertaken by the churches. And a notable sign of the times was afforded by the Ecumenical Church Conference held at Stockholm in August, 1925, at which representatives of all the Reformed Churches and also of the Greek Orthodox Church were present. This Conference placed industrial problems as the first item on its agenda, and adopted unanimously a far-sighted and statesmanlike report on the attitude of the Church to industrial questions. The interest of the Roman Catholic Church in industrial questions, especially since *Rerum Novarum*, is too well known to need emphasis.

But neither industry nor the Church can do all that is necessary. The State, as the source of law, must be called in. Often industry itself, or the Church, may take the initiative in calling for moralising regulation, but they both realise that in this work of moralisation the State, with its powers of legislation and administration, is essentially necessary.

§ 3. **The State and the Citizen.**—So far, in our discussion, we have assumed a certain philosophical view of the relation of the citizen and the State. It is necessary now to examine the basis of that view, in comparison with others that have been maintained. In the history of political and social thought, three main conceptions of the relation between the citizen and the State have been entertained. The first regards the State as a means to the development of the individual; the second regards the individual as a means to the development of the State; and the third

considers that both State and individual are personalities, ends in themselves, bound together by mutual rights and duties. The first view is historically the oldest, tracing its ancestry to Plato and Aristotle. Plato derives the existence of the State from the necessity of contributing to the welfare of the individual citizens. "The city," he says, "comes into being because, as a matter of fact, each one of us is not self-sufficient, but full of wants."¹ Aristotle, too, differing from Plato in many ways, yet agrees that the State exists for the happiness of its citizens, and its whole purpose is to secure their welfare.² And the view that the State exists exclusively for the sake of the citizens is by no means dead. "Not society but the individual," wrote McTaggart, "is the end of social life."³ This is the philosophical conception which forms the basis of the extreme individualism which tolerates State "interference" only in so far as it contributes to the security, well-being, and comfort of the individual citizen.

Diametrically opposed to this conception is the philosophical theory which maintains that the State is in itself the end. According to this theory all human action should conduce to the progress of the State, and ultimately has value only in so far as it contributes to its welfare. This theory forms the basis of all autocracies, and in recent years it has received a forceful formulation from Treitschke. "On principle," wrote Treitschke, "the State does not ask how the people is disposed, it demands unquestioning obedience, its laws must be kept whether willingly or unwillingly. It is, no doubt, a step in advance where the tacit obedience of the citizen becomes a rational consent, but this consent is not an absolute necessity."⁴

Very similar is the view which Mussolini has expressed. In the introduction to his study of Machiavelli, Mussolini writes: "The epithet 'sovereign' applied to the

¹ *Republic*, II., 369.

² *Politics*, II., 5, 7.

³ *Hegehanism and Cosmology*, § 195.

⁴ *Die Politik*, I., 32.

people is a tragic farce. . . . Systems of representative government belong to the domain of mechanics rather than to that of ethics. Even in the countries where the machinery of representative government has found for centuries its highest expression, fateful hours come when the people is no longer consulted, when the crown of its sovereignty—good enough in normal times—is slipped from it and it is ordered to accept a revolution or a peace or to march into the unknown of war. What power remains to the people? Only to utter the monosyllable which means acquiescence and obedience. Thus is the sovereignty previously accorded to the people withdrawn at the very moments when its need might be felt. . . . The Referendum is all very well when it is a question of choosing where to put the village pump, but when the supreme interests of a people are at stake, even the most democratic governments take good care not to submit them to the judgment of the people.”¹

From a different standpoint, but with the same philosophical basis, is the view vigorously emphasised by William Maclure, one of the contemporary admirers of Robert Owen, that the political system should be reorganised so as “to drown the self in a sea of sociality.”²

Each of these views is, on the face of it, one-sided. One subordinates the individual to the State, the other the State to the individual. But is there any necessity for this absolute subordination? Is it not possible that the true relationship between the State and the individual is rather one of the mutual co-operation and interaction of personalities? This is the philosophical conception of the relation of citizen and State that is more and more gaining acceptance to-day.

There is no difficulty, philosophical or legal, in regarding the State or any corporate association as a personality which grows and develops. Thus Erskine writes: “The institu-

¹ *Revue de Genève*, September, 1924, pp. 260-261.

² Podmore's *Life of Robert Owen*, p. 299.

tion known to the Romans as an *Universitas* and to us as a corporation . . . lived on as a separate *persona* in spite of changes in its membership.”¹

And if there is any principle that psychology has clearly established it is that all the organised associations of men, such as churches, clubs, or trade unions, develop a personality which is not merely a legal fiction or a metaphysical notion, but is real, living and developing in the same way and in the same sense as the intense and throbbing personality of the individual citizen. The citizen, in obeying the State, obeys an institution of which he is an organic member, and its laws which ensure his freedom are those which he has himself participated in adopting.

§ 4. Representative Government.—It is on this theory of the State that, in practice, the whole machinery of the system of representative government has been established. Individual citizens grouped in territorial constituencies elect persons to represent them in a Parliament which is conceived to be the sole sovereign representative of the will of the people. These representatives are elected on a broad programme of general principles, and when questions of detail come up for decision, it is considered that their general mandate is sufficient to guide them as to the attitude which their constituents would wish them to adopt on the question at issue. In theory none of the representatives of the citizens in Parliament is supposed to be an expert in anything; he is in Parliament simply as a representative of the general interests of all the citizens in his territorial constituency. The general knowledge and experience of these representatives is considered to be the best guarantee that the affairs of the State will be conducted in a broad, generous, and far-sighted spirit.

It is true that in most States a considerable proportion of the citizens never actively participate in any definite act of political citizenship. Both in the administrative and in

¹ *Principles of the Laws of Scotland*, III., p. 410.

the legislative functions of the State the direct activities of the citizens may appear to be extremely slight.

The administrative services of the State are carried on by large departments, staffed with officials animated by motives which do not differ from those of workers in a large private enterprise. The Department, in its ordinary work, is not explicitly conscious that it is expressing the will of the citizens of the State. The Post Office or the Board of Trade each have specific functions to perform, and these are carried out in a spirit of efficient routine which is not in general affected by the soft breezes of the citizen's approval or the violent blasts of his disapprobation.

Everybody recognises that it is right that the administrative services of the State should be organised on a business-like basis. Administration is, after all, a business, and no business succeeds if it is everybody's affair and nobody's in particular. Under the conditions of modern life the greater part of the administrative work of the State is either of a routine character requiring the services of trained officials, or it involves such complicated or intricate problems that the services of experts are needed for their solution. Such work cannot be left to the casual good will of the ordinary citizen.

If all this is admitted, does it therefore mean that the ordinary citizen has no say in, and no responsibility for, the administrative work of the State? This conclusion does not seem to follow, for three main reasons.

In the first place, every Government Department is organised on a system of hierarchical responsibility, so that ultimately the Department is responsible to the body of citizens as a whole. Every member of the civil administration is responsible for the proper discharge of his duties to some superior in his Department, and ultimately to the Minister in charge of the Department. But the Minister is responsible to the Cabinet and to the Legislative Assembly, in which he can be questioned with regard to any of the

actions of his Department. And, in practice, the ordinary citizen in the constituency frequently acts on the principle that Government Departments are responsible to the body of citizens, either by writing direct to the Minister, if he has a grievance, or by getting his Member to put a question in Parliament.

In the second place, the routine and mechanical character of the administrative work of the State does not prove that it is independent of the will of the citizens any more than the habitual actions of an individual are independent of his will.¹ Habits, as all psychologists assure us, are formed as the result of the repetition of willed actions. When habits are completely formed, for example, the habit that an Englishman forms of driving his car on the left of the road or the habit of the Frenchman of driving on the right, the necessary actions continue to take place without any explicit intervention of the will. But the habitual actions do repose on a basis of will, and when it is necessary to change them, as when the Englishman takes his car across the Channel and drives in France, the repetition of willed action is necessary until the new habit is formed.

Something very similar to this takes place in the administrative activities of the State. Every State Department administers in accordance with legislation, and this legislation was originally adopted as a result of definite volition on the part of the citizens. The administrative procedure has become habitual and mechanical, because in this way waste of effort is avoided and work can be carried on with enhanced efficiency and economy. But the very existence of the work of the administrative department reposes on the consent of the citizens that it should continue.

The third kind of evidence that the will of the citizens is, in fact, implicated in the administrative work of the State is supplied by the extent to which official administration avails itself, particularly for local assistance, of the

¹ See Hetherington and Muirhead, *Social Purpose*, p. 239.

voluntary activities of the individual citizen. The administration of education, for instance, depends for its success, not only on the efforts of the permanent officials at Whitehall, but also on the voluntary activities of elected bodies of the citizens, such as education authorities, throughout the country. Similarly, the work of the Ministry of Health involves the co-operation of a large number of local bodies, such as County and Municipal Councils and their committees. In the work of these bodies a very large number of private citizens are brought into direct contact with the activities of Government Departments, and take a real share in carrying out their administrative work. This direct participation of the citizen in local government is not only valuable to the State, but is the best training of the citizen for the service of the community in its widest and highest aspects.

Nowhere has this been so clearly realised as in Switzerland. The Swiss lay stress on the importance of a participation of the citizens in local self-government, not only as a means of instilling a sense of public duty by educating the citizens in work for the community, but also to secure that governmental action should really rest on a basis of direct collaboration of the citizens, and even on their local initiative.

"Popular government," says Bryce, "rests upon the principle that it is every citizen's business to see that the community is well governed. Each man, rich or poor, learned or ignorant, is alike bound to discharge his duty as a voter or a representative or an official or a jurymen, according to the measure of its powers. In this concentration of all the disinterested activity and wisdom the community possesses the strength of democracy was expected to lie. Its weakness was long ago noted in the saying that 'what is everybody's business is nobody's business.'"¹

If, now, we turn from the administrative functions of the State to its legislative activities, we shall find a very similar situation. On the surface the part played by the

¹ *Modern Democracies*, II., 536.

average citizen in the passing of legislation may seem to be negligible. Laws are not normally enacted, as in ancient Athens or at the present day in the Swiss Canton of Uri, by the whole body of citizens meeting in council, but by a small number of elected representatives of the citizens. It is true that these Members of Parliament are elected to represent the citizens. But a variety of circumstances conspire to weaken the relation between the representative and those whom he represents. In the first place, the representative is elected for a relatively long term of years, on a programme or platform of general principles. Once elected, he is normally secure in the tenure of his seat for the duration of the Parliament of which he has been elected a member. His actions are not carefully scrutinised by the citizens whom he represents, and he is under no obligation to consult them on the attitude he ought to adopt on questions for which his election has given him no mandate.

Further, the representatives themselves, in Parliament, appear to exercise little influence upon the course of events. They are there to represent the views of their constituents, the ordinary citizens, but even if they knew what these views were, they would find difficulty in making them effectively felt in the will of Parliament. As illustrating this view, the searching though sympathetic criticism of Graham Wallas of the House of Commons and of Congress undoubtedly presents a picture which, unflattering though it be, is not untrue. Describing a debate in the House of Commons, he says: "The way in which the discussion was organised produced a general atmosphere of intellectual slackness. Most of the Members seemed frankly to give way to it. . . . The Members present were scattered in little groups about the seats, waiting for their turn, and listening good-humouredly, but with no pretence of concentrated attention, for signs that the speaker was about to perorate for really the last time. . . . I compared the scene before me with that which I had watched from the huge gallery of the House of

Representatives at Washington, the rustling newspapers, the hurrying page-boys, the speakers droning inaudibly from their manuscripts. . . . I thought of the absence of that uproar of which I read in some foreign parliaments and of the freely whispered accusations of personal corruption in others. But I always returned to the point that the House of Commons was sitting for the purpose of organised discussion, and that organised discussion was not, in any real sense of the word, taking place." ¹

If, then, the system of representative government is such an imperfect instrument for enabling the individual citizen to express his views in the government of the State, why has it not been improved, or abolished altogether? Efforts have, indeed, been made to improve it, by giving the citizen either a direct voice in the determination of important questions, or of giving him a greater measure of control over his elected representative. The first is the method of the *referendum*, the second the *recall*.

The institution of the Referendum has been in force in Switzerland for many years. Its essence is the submission to direct popular vote on the particular issue for approval or rejection, of measures passed by the Legislature. Any proposed changes in the Federal Constitution must be submitted to Referendum, and in order to be adopted, they must be approved, on Referendum, both by a majority of all Swiss citizens voting and also by a majority of the Cantons. In the case of all Federal Laws and all Resolutions of general application (not having been declared by the Legislature to be "urgent"), the particular decision must be submitted to Referendum if a demand for such submission is made either by at least 30,000 citizens or by at least eight Cantons. In Switzerland the Referendum has, on the whole, worked well, but there is a distinct tendency to use it less and less. This shows that the citizens, in spite of possessing the power to record a direct vote on legislation, prefer in

¹ *The Great Society*, pp. 253-254.

the great majority of cases to abide by the decision of their representatives.

The Recall is a device employed in some American States. As its title indicates, it means the recall of political representatives or officials, by a popular vote before the expiry of the term of office for which they were elected. Where a prescribed proportion of the citizens have signed a petition demanding a vote on the dismissal of a political representative or official, it is provided, as for example by the Oregon law, that the vote shall be taken unless the person concerned promptly resigns. The Recall is in operation in only a few States, there is no tendency to an extension to other States, and where it is legal it is very rarely employed.

Both of these methods are, of course, perfectly consistent with the general principles of representative government, but the fact that neither has been introduced to any wide extent would perhaps suggest that, improbable as such a view would at first sight appear, the great majority of the citizens are, in fact, satisfied that the present system does enable them to express their opinions with adequate clearness and force. Certain it is that any discussion whether government should have a democratic, oligarchic, aristocratic, or other form, is now completely academic. That the best form of government is a democratic one, based on the representation of the citizens, is now a truism of all political thought. Even where certain countries seem to have departed from this principle, it is acknowledged that only temporary circumstances make this necessary, and a return to a system of representative government is always envisaged.

The will of the State, it is agreed, is constituted by the will of its citizens, and it is expressed largely in its system of legislation. The laws of the State reveal its will. They may not originally have been adopted by the unanimous will of all the citizens; it is very rarely that they are so adopted. Most laws are passed in an atmosphere of political conflict, and their inclusion in the Statute Book may be

bitterly resented by a strong minority of the citizens. But these dissenting citizens rarely form themselves into a permanently dissident group. In the vast majority of cases, once the law is on the Statute Book, it is loyally recognised by all the citizens to be an expression of the will of the State. The citizens agree that it is a law which they have imposed upon themselves, and that by obeying it they are not limiting their freedom. In the modern world some type of democratic representative government would appear to be not only the best, but the inevitable, form of political organisation.

§ 5. **Functional Representation.**—An important feature of the system of representative government, both in theory and practice, is that the representative is considered to be the exponent of the general views of his constituents, but not in any sense to be an expert or the voice of any special interest. Now, one of the interesting conclusions which emerges from Bryce's detailed examination in his *Modern Democracies* of the working of the system in the most important democratic States is that this system of general and non-technical representation has been found to complete itself, officially and unofficially, by the adjunction of permanent or temporary institutions.

In England this consultation of technical experts usually takes place through Royal Commissions or Select Committees. When a question requiring special technical knowledge comes before Parliament, Parliament recognises itself incompetent in the details of the question, and a special Commission, composed of experts of recognised standing, is appointed to examine the question in all its aspects and to present a report to Parliament. On the basis of this report and of the evidence on which it is founded, Parliament then, in the light of general principles, takes a decision on the legislation that it considers necessary. This procedure seems perfectly consistent with the principles of representative government, nay, seems even to be a necessary corollary to it. For if the sovereign Parliament of representatives

possesses *ex hypothesi* no special technical knowledge, it is necessary that it should have recourse to the advice of publicly-constituted bodies of experts.

Less legitimate, however, is the development within Parliament, or in close contact with it, of groups representing not the general interests of the citizens as a whole, but the special or exclusive interests of a particular section of the community. This development has taken place to a certain extent in England, but it is particularly noteworthy in France. In the French Chamber there is an agricultural group, a sugar group, a viticultural group, and others. These groups are organised, not to represent the citizens as a whole in certain circumscriptions, but to watch the interests of a particular section of the community and to influence the decisions of Parliament in favour of their interests. If the activities of these groups were public, little harm might result. It is when subterranean means are used that the system of the representation of interests becomes demoralising to the whole structure of representative government.

These considerations, among others, have given rise to the increasing demand in various countries for the frank and open establishment, alongside the ordinary political Parliament, of a permanent body on which would be directly represented, not the general interests of territorial circumscriptions, but the special functional interests of groups of producers and consumers.

The proposal to establish economic parliaments or national economic councils results from two factors. On the one hand, there is an increasing recognition of the all-pervading importance of the economic and industrial elements in the State ; on the other hand, there is general acceptance of the view that the ordinary citizen should undertake a more immediate participation in the actual work of government. As M. Henri de Jouvenel has said : " Sovereignty lies not in voting, but in management. The problem of social and political democracy, therefore, is how it enables

citizens to administrate within the limits of their competence, as fixed by their peers, those public interests which are also their own."

While the establishment of National Economic Councils has been considered in several countries, it is in France and Germany that the greatest progress has been realised.

The German Federal Economic Council was set up by decision of the German Reichstag on the 15th August, 1919, and the inaugural meeting of the Council was held on the 30th June, 1920. The members of the Council are appointed by the Government, on the nomination of associations and groups expressly specified in its constitution. In addition, 24 members are appointed, half by the Government and half by the Reichstag, without special nomination, as legal, economic, or technical experts. It is of interest to note the detailed distribution of seats on the Council :—

Group.	No. of Seats.	Per Cent. of Total.
I. Agriculture and forestry	68	20.86
II. Horticulture and pisciculture	6	1.84
III. Industry	68	20.86
IV. Commerce, banking, insurance	44	13.49
V. Transport and public works	34	10.43
VI. Handicrafts	36	11.04
VII. Consumers	30	9.20
VIII. Civil Service and liberal professions	16	4.90
IX. Experts appointed by Reichstag	12	3.69
X. Experts appointed by Government	12	3.69

The distribution of seats among the various occupations is based not only on the numbers employed in the occupation, but also on its economic importance. In estimating this importance the quantity and value of the articles placed on the market by each group of industries are taken into account, as also the amount of capital invested, the wages bill, and the profits distributed. The representatives of the various industrial groups are equally divided between em-

employers and workers. On the whole, the Council would appear to be a faithful reflection of the main factors of German industrial production and consumption. While in composition, in the number of its members and in respect of certain of its functions the German Economic Council may be compared to a Parliament, in the last resort its powers are really that of an advisory body. It has no power of decision, it cannot initiate bills to be presented to Parliament, it is not even entitled to order enquiries for the purpose of applying penalties ; but there seems to be some evidence for the view that it will come to play an increasingly important rôle in the economic life of Germany, and while it is not intended that economic problems should be withdrawn from examination by the political Parliament, it seems probable that the preliminary discussion which they will obtain in the Economic Council will greatly lighten the work of Parliament in proceeding to industrial legislation.

In France a National Economic Council was set up in 1925. It is not an economic parliament, but simply an advisory body. The system of representation on the Council differs in certain respects from that of the German Council. The interests represented are divided into three groups, namely (1) population and consumption ; (2) labour ; and (3) capital. The category " population " was intended to represent " the initial producer, the producer of the producer, so to speak, namely the fathers and mothers of families ; and, in addition, representatives of social hygiene, cheap housing, and mutual benefit societies." All active elements of the population are represented : intellectual and manual work, the liberal professions, real estate, commerce, industry, and banking. The detailed method of grouping is as follows :

I. *Population and Consumption* : (a) Consumers' co-operative societies and purchasers' unions (3 delegates); (b) association of mayors, municipalities (2) ; (c) users of public services (2) ; (d) parents and mutual benefit societies (2).

II. *Labour*: (A) Intellectual work and education (3); (B) Management: (a) industry (3); (b) agriculture (3); (c) commerce (2); (d) transport (1); (e) co-operation (1); (f) public services (1); (C) Paid work: (a) public officials (2); (b) technicians (2); (c) manual work: industry (5), commerce (2), agriculture (1), transport (2).

III. *Capital*: (a) Industrial and commercial capital (3); (b) real estate (2); (c) banking, stock exchange, insurance, savings banks (3).

As in the case of the German Council, the representatives of employers and workers in the French Council are equal in number, and although the labour section contains a larger number of representatives than the capital section, a number of the representatives in the labour section represent management and not labour in the ordinary sense. It follows, therefore, that the first section representing population and consumption will probably, in practice, often be the final arbiter of the fate of schemes submitted to the National Economic Council. The Council may adopt recommendations on a two-thirds vote of the members present, and may transmit them to the Prime Minister. The Government is not obliged to adopt such recommendations, but the Prime Minister must, within one month, inform the Council of the action taken or refer the question back to the Council for further consideration. It is hoped, by avoiding any risk of rivalry between Parliament and the Council, to induce Parliament to take into favourable consideration the opinions and recommendations of the Council.¹

Each Council contains features that are, in some respects, more likely to secure success than the other. The French

¹ A Government Bill for the reorganisation of the Council, which as established in 1925 was provisional, was being discussed as these pages were in the press. The new scheme involves the re-classification of the three groups represented on the Council as Production, Distribution, and Consumption.

Council has fewer members than the German ; it does not involve the appointment of a system of district councils, and the groups represented appear to be more homogeneous than those of the German Council. On the other hand, the German Council is a fully constitutional body, forming an integral part of the machinery of the State, while the French Council is merely an advisory council which, in the opinion of many, is but a sort of fifth wheel to the waggon. There seems no doubt, however, that both of these Councils, which as yet are only really in an experimental stage, will pave the way for the institution of similar bodies in all other industrial countries.

That the conceptions which have led to the creation of national economic councils in France and Germany are not alien to the British mind is suggested if we turn to a recent, but now almost forgotten, page of British history. In 1919 the Government summoned a National Industrial Conference, which met on the 27th February. Invitations to send representatives had been issued to employers' associations, trade unions, joint industrial councils, and other important industrial bodies. Altogether about 500 work-people and 300 employers' representatives were present.

As a result of the discussions of the Conference, a provisional joint committee was elected, 30 from the employers' organisations and 30 from the workers' organisations, to examine and report upon three groups of questions : (1) hours, wages, and general conditions of employment ; (2) unemployment and its prevention ; (3) the best methods of promoting co-operation between capital and labour.

At its next meeting on 4th April, the Conference adopted a report of this Committee which recommended unanimously that a permanent National Industrial Council should be established. Although at the time the Government appeared disposed to give effect to this recommendation, time passed, and in the end nothing was done. This project, thus unanimously recommended by a joint committee of the most

representative employers and work-people, has not, however, been completely forgotten, and attention has more recently been drawn to it by two men of a very different type, but both with a long and wide experience of parliamentary government. Mr. Arthur Henderson, in an article in *The Times* of 25th April, 1922, entitled "A Parliament of Industry," advocated the creation of such a body "to provide industry as a whole with a mouthpiece and an organisation through which it can express itself and to act as an advisory agent in relation to all legislative proposals affecting industry as a whole." The late Lord Milner, approaching the question from a different standpoint, also advocated a parliament of industry in a series of articles in *The Observer* of 7th, 14th, 21st, and 28th January, 1923. "Parliament," he wrote, "is a very bad arena for threshing out the complicated details of industrial organisation. Even if its ultimate intervention is necessary, it can only intervene successfully if the matters in regard to which it is called upon to act have been thoroughly discussed by practical industrialists. Under present conditions such discussion can best be assured by the creation of a national deliberative assembly in which capital and labour enjoy equal representation."

§ 6. Security, Equality, and Liberty.—The main purpose of parliaments, councils, and other organs in which the spirit of representative government is embodied is, on the one hand, to enable the citizens to express and interpret their will, and on the other hand to facilitate the performance by the State of its functions in the protection of its citizens.

Of these functions, one of the most elementary is to ensure the security of the citizen. It must maintain him in safety against the aggression of external powers, and it must also maintain him in safety against the attacks of lawless individuals within the State or against the unjustified action of the executive of the State. In most States the maintenance of the safety of the citizen in these respects is provided for, in the first place by the law of the land, and in

the second place by the good sense and common will of the people, backing, if necessary, the active intervention of the police and the army. In recent years it is coming to be realised that the State has also the duty to safeguard the security of mind of the citizen by insuring him against the common risks of life and work.

Perhaps no thinker has expressed the importance of the State in providing security for its citizens more vigorously than Bentham. Security Bentham calls "the distinctive mark of civilisation," and he points out that it is "entirely the creature of law." "Without law," he says, "there is no security, and therefore no abundance, not even a certainty of subsistence."¹ "While Industry creates, it is Law that preserves; while at the outset we owe everything to labour, yet ever afterwards we are indebted to law alone."² "In order to form a clear conception of the extent to which we ought to carry this principle of security, we must remember that the sufferings and enjoyments of man are not, like those of the brute creation, confined to sensations relating only to the particular moment under consideration. Man is susceptible of pleasure or pain by anticipation; so that it is not sufficient to secure him from present loss. We must, so far as possible, guarantee him against damage to his possessions in the future. We must extend our conception of security so as to embrace the whole vista that his imagination is capable of filling."³

Is it the function of the State to promote equality among its citizens? Most people would say that the State should secure the civic equality of its citizens, in other words, their equality in respect of the rights which they enjoy and the duties which they owe as citizens of the State. But equality in other respects, as in education, in property, in taste, would appear to be very difficult to ensure, even if it were desirable. The difficulties of absolute equality were stated

¹ *Theory of Legislation*, Oxford edition, 1914, I., p. 142.

² *Ibid.*, p. 143.

³ *Ibid.*, p. 144.

with singular force over a hundred years ago by Bentham : " If equality ought to prevail to-day, it ought, by parity of reasoning, to prevail for ever. But it could only be maintained by renewals of violence such as would be necessary to establish it. We should need an army of inquisitors and hangmen, deaf alike to piteous appeal and to railing accusation, insensible to alluring pleasures, inaccessible to personal influence, endued with all the virtues, yet engaged on a service which would kill them every one. Some great living machine would need to be incessantly at work, planing down everything which showed itself above the mark prescribed ; constant watch would have to be set for the purpose of aiding those who had squandered their shares, and of despoiling those who, by dint of strenuous toil, had increased their possessions. In such a state of affairs, the path of wisdom would lead to prodigality, the path of folly to industry." ¹

Yet even Bentham admits that the State can and must do something to " diminish inequality." How is that to be done without interfering with the principle of security? Bentham's solution is to make adjustments on the death of property-holders " the natural epoch, which puts an end alike to hope and fear." Bentham here definitely foreshadows death duties which, in a large number of States, have become a recognised method of " diminishing inequality."

In diminishing inequality the most common means adopted by the State is the imposition of graduated systems of taxation. In addition to the death duties foreshadowed by Bentham, the income tax is usually fairly steeply graduated, so that the possessor of a large income or property pays to the State a much larger proportion of his income or his property than the small-holder. In few departments has political thought made greater advances than in the science and art of taxation. In most States taxes, though they now produce an enormously larger sum than they did

¹ *Theory of Legislation*, Oxford edition, 1914, I., p. 158.

a hundred years ago, even in proportion to the national income, are probably felt to be less onerous. Take, for instance, Sidney Smith's brilliant picture of the pressure of taxation in England in 1815: "Taxes upon every article which enters into the mouth, or covers the back, or is placed under the foot—taxes upon everything which it is pleasant to see, hear, feel, smell or taste—taxes upon warmth, light, locomotion—taxes on everything on earth, and the waters under the earth—on everything that comes from abroad or is grown at home—taxes on the raw material—taxes on every fresh value that is added to it by the industry of man—taxes on the sauce which pampers a man's appetite, and the drug which restores him to health—on the ermine which decorates the judge, and the rope which hangs the criminal—on the poor man's salt, and the rich man's spice—on the brass nails of the coffin, and the ribands of the bride—at bed or board, couchant or levant, we must pay: The school-boy whips his taxed top; the beardless youth manages his taxed horse, with a taxed bridle, on a taxed road; and the dying Englishman pouring his medicine, which has paid 7 per cent., into a spoon that has paid 15 per cent., flings himself back upon his chintz bed, which has paid 22 per cent., makes his will on an eight-pound stamp and expires in the arms of an apothecary who has paid a licence of £100 for the privilege of putting him to death. . . . His virtues are handed down to posterity on taxed marble, and he will then be gathered to his fathers to be taxed no more."¹ Heavy as have been the burdens of taxation imposed by the State in the years after the Great War, they have never inspired such a classic lament.

The duty of the citizens to pay taxes for the maintenance of the services of the State is the simple corollary of the right of the citizen to claim from the State security for himself, his family, and his property. The right of the citizen to claim the protection of the laws of the land is the obverse

¹ Sidney Smith, *Works* (1839), II., 13.

of his duty to devote his activities to conserving the effectiveness of these laws. Every duty which he owes to the State implies a right on his part to claim something from the State, and every duty of the State to the citizen involves a right on the part of the citizen. In the State and the various institutions which exist within it, citizenship implies that the individual must co-ordinate the duties which correspond to his rights and order his various loyalties in a consistent conception of life.

It is another fundamental function of the State to provide for the liberty of its citizens. In Mill's classic definition, liberty means "the due satisfaction of the natural impulses of man." Anything, therefore, which obstructs this satisfaction is in conflict with the principle of liberty. Now, in a modern society obstruction does not always, nor even generally, mean the physical impossibility of satisfaction: obstruction in the psychological sense may be taken to mean such a degree of interference as in fact prevents a man from acting on any particular impulse at any particular moment. The results of obstruction may be divided into two classes, either immediate psychological reactions, such as anger or humiliation, or more permanent effects, such as changes in a man's character by the strengthening of some impulses and the weakening of others.

So far as immediate reactions are concerned, Mr. Graham Wallas has suggested (*Our Social Heritage*) that the most important fact about them is that the reaction depends more on the nature of the obstructing cause or agent than on the nature of the obstruction. For example, a propertyless workman has the feeling of being "unfree" or a "wage-slave" only when he believes that his want of property is due to the deliberate actions of men who are thereby violating the normal conditions of human society. The inhabitants of a country where (as in America fifty years ago) private property in the form of land or railways is taken as a matter

of course do not feel unfree because they are, in respect of land or railways, propertyless. And even in the America of 1928, where the propertyless man of to-day may be the propertied man of to-morrow, the propertyless man does not have the feeling of belonging to an unfree proletariat. He does not ascribe his lack of property to the industrial order of society but to "bad luck" or the success of some rival, or ill-health or some other particular cause. On the other hand, in a country such as England or Germany, where passage from the "propertyless" to the "propertied" class is a more difficult and therefore a rarer occurrence, there is a "class-conscious proletariat," which does feel unfree because it ascribes its lack of property to the industrial system as a whole, to "capitalism" or to "exploitation." Psychologically considered, therefore, the feeling of freedom has no necessary connection with the possession of property. The propertyless man feels "unfree" only when he is convinced that the industrial system under which he works is a conspiracy to defraud him of his rights.

Liberty is never absolute. No human being is completely free, in the sense of being completely above all restrictions or obstructions. A human being cannot walk upside down on the ceiling as a fly does. But no human being, however great an enthusiast for freedom he may be, has any feeling of unfreedom on that account. Such an obstruction to his liberty never comes within the field of his consciousness as an obstruction. Again, it very often happens that two human beings, in precisely similar circumstances and precisely similar conditions of life, have very different feelings with regard to the liberty they enjoy. By one, the obstructions may be exaggerated until they overcast all the sky of liberty; by the other they may be regarded as not worth taking into consideration at all.

This does not mean that liberty is merely a feeling, a subjective sensation or group of sensations. The conception of liberty involves certain objective characteristics, without

which, whatever the feelings of a particular individual, it cannot be said to exist. The slave, deprived of the power of any action at all without the consent of his owner, whatever his feelings may be, is not free. The serf, tied to the land on which he works, is not free. The subject of an autocratic monarch, deprived of the power of free speech, is not free. If we analyse these examples, we shall find that it is regarded as normal that certain impulses should be granted expression, and any order of society which is so organised that these impulses are consistently obstructed is regarded as an order in which to that extent freedom does not exist. Freedom, then, in its first sense is a system of conditions in which impulses regarded by the community as right meet with no obstruction to their realisation. But this negative conception of freedom is not adequate. Freedom also has a positive meaning. This positive meaning has never, in all history, been so brilliantly portrayed as by Pericles in his Funeral Oration. Often as the words have been quoted, they bear repetition: "As we manage our public life in accordance with the principle of Liberty, so we carry the same spirit into our daily relations with each other. . . . Our constitution is named a democracy, because it is in the hands not of the few but of the many. But our laws secure equal justice for all in their private disputes, and our public opinion welcomes and honours talent in every branch of achievement, not for any partisan reason, but on grounds of excellence alone. . . . We have no black looks or angry words for our neighbour if he does anything merely because he finds pleasure in it, and we abstain from the petty acts of churlishness which, though they do no actual harm, yet cause annoyance to those who note them. Open and friendly in our private intercourse, in our public acts we keep strictly within the control of law. We acknowledge the restraint of reverence; we are obedient to whosoever is set in authority, and to the laws, more especially to those which offer protection to the oppressed and those

unwritten ordinances whose transgression brings admitted shame." And yet . . . those silver mines at Laurium. What would one of the miserable slaves who toiled there have said if he had chanced to hear the speech of Pericles ?

Negative freedom may be called the possibility of living the good life, but positive freedom is the good life itself. From the standpoint of negative freedom the unemployed lounging at the street corner and the millionaire who passes in his car are on an absolute equality. It is when we compare them from the standpoint of positive freedom that the difference between them becomes glaring. The unemployed workman is not positively free. He is clearly not living the full life which freedom requires, for he is producing nothing, and he is a burden on the community. Even as a consumer he is not living the full life, for his anxieties obstruct the free use of his all too abundant leisure.

§ 7. The State and the Nation.—Up to this point our discussion of the rights and duties of the citizen in the State has not touched the question of the relations between the State and the Nation. Now the State and the Nation are not the same thing. A State may include several nations, or a nation may be split up between various States. Thus, before the war, the State of Austria-Hungary included Germans, Hungarians, Czechs, Slovaks, and a number of other nations or fragments of nations. On the other hand, the Polish nation did not constitute a State, but was split into portions constituting parts of Austria-Hungary, Russia, and Germany.

Half a century ago the co-existence of several nations within one State was considered not only desirable but almost necessary as a condition of the development of the spirit of freedom. Thus, sixty years ago Lord Acton wrote : "The combination of different nations in one State is as necessary a condition of civilised life as the combination of men in society. . . . It is in the cauldron of the State that the fusion takes place by which the vigour, the knowledge, and

the capacity of one portion of mankind may be communicated to another. The co-existence of several nations under the same State is *a test*, as well as the best security, *of its freedom*. It is also one of the chief instruments of civilisation.”¹

Since that time, however, a change has taken place in the political thinking of the world. There has been an increasing tendency for nations which did not constitute separate States to claim independent statehood. This tendency was given legal sanction by the Treaty of Versailles, which was responsible for the establishment of a large number of new independent States. Among the new States set up or envisaged by the Treaty are Poland, Czechoslovakia, Finland, Esthonia, Latvia, and Lithuania. There still remain, it is true, a certain number of States which contain more than one nation or national strain, such as our own (English, Scottish, Northern Irish, and Welsh), Czechoslovakia (Czechs and Slovaks), and the Serb-Croat-Slovene Kingdom. But in the two last-named States the nations represented are by no means completely content to live together as constituents in one State, and our own remains one of the very few examples of a State in which different nations live and work together in harmony.

From the standpoint of citizenship, is it desirable that this tendency for State and Nation to coincide should continue to operate? As in every other field of life, advantages and disadvantages are involved, but the advantages far outweigh the disadvantages. A divergence of nationalities within a single State nearly always leads to friction, and even to the borders of actual conflict. One nationality is usually stronger either in numbers or in wealth or in culture than the others, and the members of the weaker nation feel, whether rightly or wrongly, that they are being governed by the stronger nation and not by themselves. Now, modern government within the State means, as we have seen, self-government, the government of the citizens by

¹ *The History of Freedom and Other Essays*, pp. 290, 298.

themselves. If, in the legislative body of any State, the representatives of a particular nation within the State form a solid, or almost solid, *bloc* standing apart from, or in opposition to, the representatives of the other nation or nations, they do not in any real sense participate in the government, either of the State as a whole or of that portion of it constituted by their nation. Such a nation naturally feels that it is being governed by the other nation or nations within the State. In such a State the conditions of self-government are absent, absent even the conditions of real citizenship.

In other cases two nations may live and work together in the same State, and may attempt to participate loyally in all the activities of the State. But too often in such cases there is a fundamental lack of sympathy between the nations, in spite of their will to work together. The result may be *magnificent, but it is not citizenship*. Such a situation may be compared to that of the marriage of a man and woman of incompatible temperament. They may continue to live together in tolerable harmony, and even with mutual respect. In spite of their radical lack of sympathy, they may by an effort of will continue within the bonds of marriage, rather than proceed to open conflict and divorce. Such a marriage may call forth qualities of will, of forbearance, of patience, but it is not a successful marriage. It does not possess that community of spirit on the basis of which alone the life of the family can be founded. And this is equally true of a State composed of nations or fragments of nations of alien feelings and discordant sentiments. That State is happiest which is a single nation. This truth has been fully realised in the United States. At one time the unrestricted immigration of hundreds of thousands of nationals of various European States constituted a real danger that these nationals would, in a new country, retain their national sentiments and their national language, and that national animosities would complicate or perhaps wreck the life of

the State as a whole. This danger was realised, and by means of compulsory education in a single language, namely English, and an insistence on "100 per cent. Americanism," every endeavour has been made, and with remarkable success, to transmute the heterogeneous national elements into a homogeneous and united American nation.

"But," it may perhaps be objected, "your theory that that State is happiest which is a single nation must surely recognise the existence of a very important exception, the British Empire." This is not really an exception. For the British Empire is not one State but a group of States. It is the British Commonwealth of Nations, a unity which includes a variety of separate Nation States which are to all intents and purposes autonomous. Such a unity as this permits the existence of an intense loyalty of the member States to the Commonwealth, whereas if the various nations were forced against their will to remain within the limits of participation in a single State their loyalty would fade and die. This has been well exemplified in the case of Ireland. Southern Ireland, at one time a rebellious nation within the United Kingdom, has become a loyal Nation-State of the British Commonwealth.

The ideal of nationality is that the nation should govern itself, that it should form an autonomous unit for the expression of its sentiments and the achievement of its ends. The citizen of a State who knows that all other citizens of the State are bound to him not only by participation in the activities of the State but by membership of his own nation, finds his loyalty to the State reinforced by national patriotism, his intellectual approval of the aims of the State confirmed by his warm sentiments of national ambition. Only when the State is the Nation and the Nation is the State do all the material and spiritual circumstances coexist that make possible the realisation of citizenship in its fullest intensity.

In the modern world the Nation-State is not an isolated

unit. No Nation-State can pursue its own aims in ignorance of, or in disregard for, the aims of other Nation-States. In an earlier era States might, and did, seek national ends in a spirit of isolated particularism. Carthage and Rome might, and did, pursue a policy of separate national expansion for years before coming into conflict. In the modern world no single step can be taken by a State outside the sphere of its own domestic interests without coming into conflict with other States. It is the ineluctable pressure of events that, by bringing each State into close spiritual and material contact with others, has immensely increased the possibilities of conflict, but also the possibilities of co-operation.

Sixty years ago political thinkers looked for an increase of the co-operation of different nations within great States : now we look for an increase of co-operation between Nation-States within the great Commonwealth of Nations. It is to be hoped that our expectations will not be so cruelly disappointed as were theirs. The tendency towards national self-determination, which we have represented as not only prevailing in fact but desirable in theory, would be an incomplete and dangerous essay in the history of political institutions if it were not supplemented by an impulse towards closer and more intimate international co-operation.

This impulse towards international co-operation does exist, and it shows every evidence of becoming stronger and more effective. But if the whole movement of international co-operation is to develop as it ought, it is particularly necessary that the peoples of the world should be clear as to its limits and its conditions.¹

§ 8. Nationalism and Internationalism.—In no field

¹ It is an interesting historical fact that the word "International" was first used by Bentham. Bentham distinguishes jurisprudence into *national* and *international*. He points out that the word "International" is a new one, and he claims that the expression "International law" is a clearer description of what was known in his time as "the law of nations" (*Principles of Morals and Legislation*, Chap. XVII., Art. XXV.).

does greater confusion of thought exist than in respect of the meaning of internationalism. There are several erroneous, and even vicious views, of which two in particular should be mentioned.

(1) *Absolute Universalism*.—According to this view, all national differences should disappear ; all States should lose their identity, and one all-embracing Dominion should alone exist. Though the only historical attempt at the achievement of this result was the Holy Roman Empire, many philosophic theories have advocated its desirability. But it is safe to say that even if this ideal could be realised, it would not be for the well-being of the world. From the philosophic standpoint it would mean the hypostatisation of an undifferentiated unity, a "night in which all cows are black." From the standpoint of the conservation of the meaning and colour of life, it would result in the destruction of all national differences. But would the world really be richer if the differences between Italian and British art were to disappear, if German and Russian music were to become an indefinite international symphony, if French and Scandinavian literature were to coalesce? These national differences are worth keeping, just as the privacies and intimacies of family life are worth keeping in the wider whole of the State. "No cold relation," said Burke, "is a zealous citizen," and we may add that no lukewarm national is likely to be a good citizen of the world.

(2) *Vague Humanitarianism*.—There are some people who entertain a sort of vague and transcendental humanitarianism. This is very apt to result from, or to end in, a general sentimentality which is affected by what is at a distance and does not care for what is near. William James referred, as an instance of this, to the Russian lady who, in a warm drawing-room, agonised over the sufferings of the world while her coachman froze to death outside. It was said of Mirabeau that he loved all men except those whom he knew intimately.

Such humanitarianism may often go no deeper than words. Sir Henry Hadow¹ refers to a letter written by a gentleman to a London weekly to say that his eyes filled with tears when he thought about the sufferings of the Mousterian cave-men, but that his weeping turned to "dry-eyed horror" when he contemplated their misdeeds. There are few people who can rise to this height of sensitiveness, and some of those who do may not really feel as deeply as their words suggest. We all remember the remark of Dr. Johnson, with his sturdy common sense: "Sir, when a butcher says that his heart bleeds for his country, he suffers in fact no uneasy feeling."

Sympathy is excited not by the general, however stupendous, but by the particular. If we read the bare fact that a hundred thousand persons have perished in an earthquake, little impression is made on us; but if we read a detailed account of the sufferings of a single family in the catastrophe our sympathy is immediately aroused.

What is needed is neither absolute universalism nor vague humanitarianism, but some system that will preserve what is good in the spirit of nationality, while eliminating the narrow Jingoism and chauvinism that is blind to what is good in other nations.

What is international is not necessarily either good or bad. Neither "international" nor "national" is a moral predicate. The cocaine traffic is as "international" as Christianity. National differences must be maintained, but international co-operation is necessary, for in the modern world no State can be isolated. It is by the interchange of experience and resources that the organic variety of the whole is constituted. Lord Bryce, discussing this interchange, classifies it under the three Aristotelian categories of friendship—advantage, pleasure, and character.² Under the head of advantage fall many subdivisions: commerce,

¹ *Citizenship*, p. 183.

² *International Relations*, pp. 130-134.

transport, finance, production; each of which may be a cause either of discord or of harmony. Discoveries of gold or radium or oil certainly add to the extent of international relations, but they may do this by leading to jealousies and disputes. Every day commerce and finance are tending to become more international. On the Stock Exchanges of London, New York, Paris, and Vienna, the fortunes of people in many different countries are made or lost. The international ramifications of commerce are all-pervading. The great banks are inter-related, and such products as oil or tobacco are exploited throughout the whole world by a few great international trusts.

The other two sources of international relations Lord Bryce considers to be of less importance. Pleasure, under which he includes all contributions to literature and art as well as to the beauty and amenity of life, is in his opinion a fair-weather indulgence. Character, he thinks, has even less influence, for "nobody ever heard of a nation whose virtues made other nations love it." But this apophthegm, if it be true at all, is true only in the sense in which it could be said, "nobody ever heard of a man whose virtues made other men love him." In other words, neither individuals nor States appreciate others because of the lists of virtues that they may be said to possess, but because of the whole personality that they express. And character is one of the most important of the aspects not only of the individual citizen, but also of the State as a whole. A State which has a reputation for keeping its word, for instance, will do much to lead to the development of an atmosphere of international confidence.

Internationalism, we may venture, is the synthesis of nationalism on the one hand and universalism on the other.

It is based on the belief that the differences between nations exemplified by the individual characteristics which exist within them have a real contribution to render to the life of society as a whole, and that the complete negation

of the principle of nationalism involved in universalism would be an inestimable loss of value to the world.

In the development of the international spirit, psychological considerations have an important part to play. Internationalism is a matter both of reason and of feeling. "As soon as man understands that his fellow-man suffers the same pains and joys as himself, longs for the same goods, fears the same evils, throbs with the same emotions and desires, then he shares with him in some degree these feelings, in virtue of that fundamental law of all social beings, the law of primitive sympathy; then also pity and sympathetic sorrow and tender regard are awakened in his breast; then his fellow-man is no longer the object of his cold or hostile glances, as a certain rival and probable enemy, but is seen to be a fellow-toiler and sufferer whom he is willing to succour, a fellow-creature whose joys and sorrows alike he cannot but share in some degree."¹

This account of the importance of sympathy in leading to the development of a spirit of international co-operation, while it contains an important element of truth, is not the whole truth; for the close geographical association of two nations, while it facilitates intercourse, also multiplies the possibilities of friction and rivalry. Wars, as well as international co-operation, are born from contact. Merely to increase possibilities of intercourse between peoples does not necessarily contribute to the maintenance of peace. Intercourse may breed hatred as easily as love.

International problems are relatively new in political science. Relations between States have always existed, and a system of international law has been in process of development for hundreds of years. But the relations between States have not formed the subject-matter of such profound reflection as the relations between individuals within the State. Plato deliberately makes his ideal State self-sufficing.

¹ William McDougall, *The Group Mind*, pp. 296-297.

All except the citizens of the State are excluded from the benefits it confers. The relations between States are purely those of mutual exclusion. On this point Aristotle agrees with Plato. His State also is self-contained, and its most important relation to other States is that of war. For Plato and Aristotle genuinely international relations simply do not exist. In the modern world, on the contrary, each State and its citizens is subject to the constant influence of what is done by all other States and their citizens.

The importance of this interaction has been brilliantly emphasised by MacIver: "The current of social intercourse brings physical stimulus to individual and nation; contact with other peoples, as with other men, brings new ideas, the salt of society without which one way of custom good or bad, one standard growing more rigid as its spontaneity wears away, inevitably corrupts the world. The growing difference between the older and the newer ways of nationality-contact forms one of the best reasons for the hope that our world of to-day may not, like the world of other ages, harden in tradition while it weakens in character, until the institutions which its younger spirit built become mere vessels to contain its decay."¹

If intercourse between the peoples is to produce genuine international co-operation, it must be directed into definite channels and be made to serve definite ends. That is why international organisations are so important. They crystallise into real effort in a determinate field what would otherwise be vague sympathies and nebulous aspirations. Definite machinery is needed to facilitate intercourse, to co-ordinate the experience of peoples, to render available to all States the results of the experiments in any, and to conciliate conflicting interests.

It was the realisation of this need for the definite organisation of international relations in various specific fields

¹ R. MacIver, *Community*, p. 283.

that recently prompted Mr. John Galsworthy to address an appeal to science, finance, and the Press to "exchange international thought." "The exchange of international thought which alone can save us," he wrote, "is the exchange of thought between craftsmen—between the statesmen of the different countries; the lawyers of the different countries; the scientists, the financiers, the writers of the different countries."¹

This "exchange of international thought" is already, in a limited degree, in operation. Some 300 international organisations of all kinds exist, affiliating internationally not only individuals but groups and associations such as scientific congresses, library institutions, churches, artistic academies, trade unions, employers' organisations, and many other kinds of corporate bodies. States also are bound together in international relations. Such international associations as the Universal Postal Union, the International Hydrographical Bureau, and the International Institute of Agriculture interrelate States in regard to particular aspects of their functions to assure order, liberty, and progress.

States have also been successful in arranging between themselves for the voluntary mapping of the heavens, for the voluntary introduction of uniformity into scientific terminology and other matters. Similarly, States have arranged internationally for coercive action to be taken over individuals, either by the officials of a particular State or by international bodies, for the maintenance of the international "rule of the road" at sea, for the enforcement of quarantine, and in connection with extradition proceedings.

But most important of all, as an agent of international co-operation, is the League of Nations, with its International Labour Organisation and its Permanent Court of International Justice. It is in the financial, economic,

¹ *International Thought*, W. Heffer & Sons.

and industrial fields, with which the League and the Labour Organisation have been specially concerned, that international relations have most intensely developed. An essential characteristic of the modern industrial order is its internationalism, internationalism not as a philosophical theory, but as a system of practice to which the world has been driven by the inexorable logic of events.

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